

**RFP 3257 – ATTACHMENT H**

**RPS STANDARD FORM CONTRACT**

**(FUEL BASED BID FACILITIES)**

**BY AND BETWEEN**

**THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY**

**AND**

**[NAME OF SELLER]**

**Dated: \_\_\_\_\_, 2016**

This Agreement ("Agreement") is entered into as of \_\_\_\_\_, 2016 (the "Effective Date") by and between the New York State Energy Research and Development Authority ("NYSERDA"), a public benefit corporation, having a principal business address of 17 Columbia Circle, Albany, New York 12203, and [Offeror] ("Seller"), a [insert as appropriate], having a principal business address of \_\_\_\_\_. NYSEDA and Seller are each referred to herein as a "Party" and are collectively referred to herein as the "Parties."

WHEREAS, the New York State Public Service Commission ("PSC") adopted a Renewable Portfolio Standard ("RPS") program to address the energy, economic, and environmental objectives of New York State by creating the potential to build new industries in the State based on clean, environmentally responsible energy technologies (*See* Case 03-E-0188, "Order Regarding Retail Renewable Portfolio Standard" issued and effective September 24, 2004, and subsequent orders under Case No. 03-E-0188 (the "Orders")) and the Orders designate NYSEDA as the Central Procurement Administrator of the RPS Program and all associated funding; and

WHEREAS, on February 26, 2015 the Public Service Commission's Reforming the Energy Vision, "Order Adopting Regulatory Policy Framework and Implementation Plan" (14-M-0101) directed NYSEDA to conduct an additional Renewable Portfolio Standard Main Tier Solicitation in 2016; and

WHEREAS, funding authorization for this solicitation was confirmed by the Public Service Commission's January 21, 2016 Clean Energy Standard "Order Authorizing the Clean Energy Fund Framework" (14-M-0094), and

WHEREAS, NYSEDA has conducted a competitive Request for Proposals ("RFP 3257") to procure rights to RPS-eligible renewable energy attributes; and

WHEREAS, NYSEDA RFP 3257, which is incorporated herein and made part hereof, provided, among other things, that this RPS Standard Form Contract ("Agreement") would be employed to govern the rights and obligations of the Parties; and

WHEREAS, Seller has participated in RFP 3257 and has been selected by NYSEDA as a winning bidder with respect to the [name of facility] ("Bid Facility"); and

WHEREAS, the Seller agrees to sell to NYSEDA, and NYSEDA agrees to purchase from Seller, the RPS Attributes, as defined herein, and including the Certificates created by the New York Generation Tracking System associated with the RPS Attributes attributable to the energy production of the Bid Facility described in the Bid Proposal submitted in response to RFP 3257 during the Contract Delivery Term, on the terms and subject to the conditions set forth herein;

NOW, THEREFORE, this Agreement has been entered into by the Parties to define, among other things, their rights and obligations concerning the generation of RPS Attributes by Seller and delivery of all right and title to RPS Attributes to NYSEDA, and the payments by NYSEDA to Seller during the term of this Agreement.

## Article I

### Definitions

The terms defined in this Article I, whenever used in this Agreement (including in any Exhibit hereto), shall have the respective meanings indicated below for all purposes of this Agreement (each such meaning to be equally applicable to the singular and the plural forms of the respective terms so defined). All references herein to a Section, Article or Exhibit are to a Section, Article or Exhibit of or to this Agreement, unless otherwise indicated. The words “hereby”, “herein”, “hereof”, “hereunder” and words of similar import refer to this Agreement as a whole (including any Exhibit) and not merely to the specific section, paragraph or clause in which such word appears. The words “include”, “includes”, and “including” shall be deemed, in every instance, to be followed by the phrase “without limitation.” Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. Except as otherwise expressly provided herein, all references to “dollars” and “\$” shall be deemed references to the lawful money of the United States of America.

Actual Annual Production: The amount, in MWh, of the total electric energy produced by the Bid Facility during any Contract Year, measured at the Injection Point.

Actual Annual Eligible Production: The amount, in MWh, of the Actual Eligible Production during a full Contract Year.

Actual Eligible Production: The amount, in MWh, of the electric energy produced by the Bid Facility during any period within a Contract Year, measured at the Injection Point, except that:

- (i) for a Fuel-Based Bid Facility that has never used eligible fuels, the Actual Eligible Production shall reflect the eligible biomass generation only, determined as the Actual Production of the entire Bid Facility, multiplied by the BTU input ratio of (a) the biomass fuel heat input to (b) the total fuel heat input, consistent with how such terms are applied for Provisional/Operational Certification (See Exhibit E, which is annexed hereto and made part hereof);
- (ii) for a Fuel-Based Bid Facility that used eligible fuels, including co-firing with ineligible fuels, on or before January 1, 2003, the Actual Eligible Production shall reflect only that Actual Production using eligible biomass, biogas, or liquid bio-fuel above the historical baseline production established through the Provisional/Operational Certification Process (See Exhibit E, which is annexed hereto and made part hereof).

Actual Production: The amount, in MWh, of the total electric energy production of the Bid Facility during any period within a Contract Year.

Bid Capacity: Bid Capacity shall equal the Bid Quantity Percentage multiplied by the Nameplate Capacity of the Bid Facility. In the case of repowering, the Bid Capacity shall equal the Bid Quantity divided by the Expected Average Annual Production, multiplied by the Nameplate Capacity. The Bid Capacity under this Agreement shall be \_\_ MW.

Bidder: An individual or entity submitting an Application Package and Bid Proposal in response to RFP 3257. Such entity need not be the owner of the Bid Facility, but must have secured rights to the RPS Attributes from the Bid Facility sufficient to satisfy all performance requirements stated in this RFP and the RPS Standard Form Contract.

Bid Facility: The electric generating station that has been identified and described in the Provisional Certification Form submitted to NYSERDA and identified on page 1 of this Agreement.

Bid Price: A single fixed production payment, expressed in \$/MWh, applicable to each RPS Attribute offered as performance throughout the Contract Delivery Term. Subject to Article V, for all transactions contemplated and consummated under this Agreement the Bid Price shall be \$ \_\_\_\_.

Bid Quantity: The amount, in MWh, of RPS Attributes the Bid Facility expects to proffer as performance under the RPS Standard Form Contract over each Contract Year during the Contract Delivery Term. The Bid Quantity must be the same for each Contract Year throughout the Contract Delivery Term, subject to adjustments pursuant to Article IV (Payment) and Article V (Adjustments). This number will equal the Expected Annual Eligible Production multiplied by the Bid Quantity Percentage. Subject to Article V, for all transactions contemplated and consummated under this Agreement the Bid Quantity shall be \_\_\_\_ MWh.

Bid Quantity Percentage: The percentage of the Bid Facility's [Actual] Expected Annual Eligible Production that will be committed to performance under an RPS Standard Form Contract. The Bid Quantity Percentage must be at least 30% and may not exceed 95%, and will be applied to Actual Eligible Production in any period during the Contract Delivery Term to establish compliance with contract requirements. For all transactions contemplated and consummated under this Agreement the Bid Quantity Percentage shall be \_\_\_\_%.

Capacity Factor: The ratio, expressed as a percentage up to two decimal places, of the total electricity that the Bid Facility expects to produce during a Contract Year compared to the total potential electricity that could be produced if the Bid Facility operates at 100 % of the Nameplate Capacity during every hour of the Contract Year.

Certificate: The NYGATS electronic record of generation data representing all of the attributes from one MWh of electricity generation from a Bid Facility registered with the NYGATS tracking system. NYGATS will create exactly one Certificate per MWh of generation.

Certification and Assignment of Rights Form: The Certification and Assignment of Rights Form in the form attached as Exhibit B hereto.

Commercial Operation: A state of operational readiness under which (i) generating capacity is available and physically producing electric energy and associated RPS Attributes, and (ii) all rights, abilities, permits and approvals to schedule and deliver energy to the Injection Point have been obtained.

Commercial Operation Milestone Date: The Commercial Operation Milestone Date shall be April 30, 2018. The Commercial Operation Milestone Date may be extended (see Article II, Purchase and Sale of Rights to RPS Attributes, Section 2.09).

Contract Delivery Term: The period of performance under this Agreement. The Contract Delivery Term will commence on the first day of the month after the Bid Facility commences Commercial Operation. For Bid Facilities in Commercial Operation as of the date of selection for an award, unless otherwise agreed to in writing by NYSERDA, the Contract Delivery Term shall commence on the first day of the month after the Effective Date of the RPS Standard Form Contract. The Contract Delivery Term shall extend for the term of the Contract Tenor.

Contract Security: All amounts provided to NYSERDA as defined in Article XV (Contract Security) of this Agreement.

Contract Tenor: The duration, in years, of the Contract Delivery Term as defined on the Bid Proposal form submitted for the Bid Facility. The Contract Tenor shall be \_\_\_ years.

Contract Year: A 12-month period commencing with the beginning of the Contract Delivery Term and each anniversary thereof within the Contract Delivery Term.

Customer-Sited Bid Facility: A Bid Facility interconnected on the customer side of a retail electric meter.

Delivery Point: The Delivery Point shall be the Injection Point.

Expected Total Dollars: The total dollar amount of Incremental Economic Benefits, as presented in the Bid Proposal, expected to accrue to New York as a result of the development, construction, modification, and operation of the Bid Facility through the first three (3) Contract Years. The Expected Total Dollars under this Agreement shall be \$\_\_\_\_\_.

Fuel-Based Bid Facility: The Bid Facility identified herein is a Fuel-Based Bid Facility.

Incremental Economic Benefits: Incremental Economic Benefits are financial expenditures benefitting New York State within the categories specified in Section XI, A; Section 3 of RFP 3257 and are those that a Bidder can demonstrate: (1) will accrue subsequent to an award under RFP 3257, and (2) would not have accrued but for the award of a contract under RFP 3257. Economic benefits previously claimed with respect to a Bid Facility that is subject to a pending award under a previous solicitation or that is the subject of a current RPS contract are not Incremental Economic Benefits.

Injection Point: The generator bus or location where (a) the administrator of the wholesale power market, (b) the operator of the transmission/distribution utility, public authority or municipal electric company, or (c) in the case of customer-sited generation, the dedicated generation meter at which a third party, measures, or otherwise determines, energy production from the Bid Facility.

Installed Bid Capacity: Installed Bid Capacity shall equal the gross generating capacity, in MW, of the entire Bid Facility that achieves Operational Certification multiplied by the Bid Quantity Percentage. In the case of repowering and co-firing, the Installed Bid Capacity shall equal the Bid Quantity Percentage multiplied by the portion of the gross generating capacity (MW) that has been repowered, upgraded and or retrofitted as determined by Operational Certification.

Nameplate Capacity: The gross generating capacity of the entire Bid Facility, post upgrade/repowering, in MW. The Nameplate Capacity under this Agreement shall be \_\_\_ MW.

New York Control Area (NYCA): The control area that is under the control of the NYISO which includes transmission facilities listed in the ISO/TO Agreement Appendices A-1 and A-2, as amended from time-to-time.

New York Generation Attribute Tracking System (NYGATS): The tracking system that records electricity generation attribute information within New York State, and processes generation attribute information from energy imported and consumed within New York State, as a basis for creating tradable generation attribute Certificates.

NYISO: The New York Independent System Operator, Inc. is the administrator of the wholesale power markets in New York and manages the physical electrical operations of the New York Control Area (NYCA).

Operational Certification: Under the Orders, Operational Certification must be granted by the New York State Department of Public Service before payment under this Agreement may be made by NYSERDA. Operational Certification verifies that the Bid Facility has been constructed and/or will operate in accordance with the proposal submitted, for which Provisional Certification was granted and for which an award was made.

Quantity Obligation: Shall mean, for any period during the Contract Delivery Term, the number of MWh calculated as the Bid Quantity Percentage multiplied by the Actual Eligible Production; subject, however, to adjustments pursuant to Article V, Adjustments.

Repowering: Shall mean a generation unit other than a Hydroelectric Upgrade, with an initial date of Commercial Operation no later than December 31, 2002, that has been or will be substantially and verifiably repowered on or after January 1, 2003, such that the Actual Annual Production from the facility after Repowering is or will be demonstrably greater than the Actual Annual Production prior to the January 1, 2003 level by at least five%.

RPS-eligible Attributes: Shall mean all environmental characteristics, claims, credits, benefits, emissions reductions, offsets, allowances, allocations, howsoever characterized, denominated, measured or entitled, attributable to the generation of Actual Eligible Production by a Bid Facility. One RPS-eligible Attribute shall be created upon the generation by a Bid Facility of one MWh of Actual Eligible Production. RPS-eligible Attributes include but are not limited to: (i) any direct emissions or any avoided emissions of pollutants to the air, soil or water including but not limited to sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter and other pollutants; (ii) any direct or avoided emissions of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and other greenhouse gases (GHGs) that have been or may be determined

by the United Nations Intergovernmental Panel on Climate Change to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere; (iii) all set-aside allowances and/or allocations from emissions trading programs made unnecessary for compliance in such program as a result of performance under an RPS agreement, including but not limited to allocations available under 6 NYCRR §§ 204, 237 and 238; and (iv) all credits, certificates, registrations, recordations, or other memorializations of whatever type or sort, representing any of the above. If the Bid Facility is a biomass or landfill gas facility and the Seller receives any tradable credits, benefits, emissions reductions, offsets, and allowances based on the greenhouse gas reduction benefits attributed not to the production of electricity but rather to its fuel production, collection, conversion or usage, it shall provide NYSERDA or its designee with sufficient credits, benefits, emissions reductions, offsets, and allowances to ensure that there are zero net GHGs associated with the production of electricity from such Bid Facility.

RPS-eligible Attributes do not include (i) any energy, capacity, reliability or other power products, such as ancillary services; (ii) production tax credits associated with the construction or operation of the Bid Facility or other financial incentives in the form of credits, reductions, or allowances associated with the Bid Facility that are applicable to a state or federal income taxation obligation; (iii) fuel-related subsidies or "tipping fees" that may be paid to the Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular pre-existing pollutants or the promotion of local environmental benefits; or (iv) emission reduction credits encumbered or used by the Bid Facility for compliance with local, state, or federal operating and/or air quality permits.

Once operational, NYGATS will create Certificates associated with RPS Attributes, which will embody title on a per megawatt hour (MWh) basis to the RPS-eligible attributes.

RPS Attributes: The RPS-eligible Attributes associated with the Quantity Obligation which shall be delivered as performance during the Contract Delivery Term. (See Article II, Purchase and Sale of Rights to RPS Attributes).

RPS Standard Form Contract: The standard contractual document issued as a part of RFP 3257 to be entered into by NYSERDA and selected Bidders, which shall define, among other things, their rights and obligations concerning the generation of RPS Attributes, the delivery of all right and title to RPS Attributes to NYSERDA, and the payments by NYSERDA during the term of the agreement.

SEQRA: New York's State Environmental Quality Review Act.

Transfer: Until such time as the NYGATS is available for purposes of transferring Certificates associated with RPS Attributes, the assignment and transfer ("Transfer") of RPS Attributes to NYSERDA shall be accomplished through their inclusion on the Certification and Assignment of Rights Form, which must accompany each invoice; upon the availability of NYGATS, Transfer will be accomplished by the delivery of Certificates associated with each RPS Attribute to an account designated by NYSERDA. See Article IV; Section 2.04.

Verified Total Dollars: The total dollar amount of Incremental Economic Benefits verified by NYSERDA to have accrued to New York as a result of the development,

construction/modification, and operation of the Bid Facility through the first three (3) Contract Years.

Voluntary Market: The market through which sales are made of renewable attributes for purposes other than compliance.

## Article II

### Purchase and Sale of Rights to RPS Attributes

Section 2.01. On the terms and subject to the conditions and provisions of this Agreement, Seller agrees to sell, assign, convey and deliver to NYSERDA, and NYSERDA agrees to purchase from the Seller, all right, title and interest in the RPS Attributes associated with the Quantity Obligation of the Bid Facility, and, once NYGATS is fully functional, the Certificates associated with the RPS Attributes, during each month of the Contract Delivery Term.

Section 2.02. Such right, title and interest shall include perpetual and exclusive rights to all RPS Attributes, including but not limited to the exclusive rights to claim or represent, consistent with New York State Environmental Disclosure rules: (a) that the energy associated with RPS Attributes was generated by the Bid Facility; and (b) that New York State and or the RPS Program is responsible for the environmental benefits including reductions in emissions and/or other pollution or any other environmental benefit resulting from the generation of the energy associated with RPS Attributes.

Section 2.03. At the time of such sale, assignment and conveyance by Seller to NYSERDA, the RPS Attributes and the Certificates associated with the RPS Attributes shall be free and clear of all liens, judgments, encumbrances and restrictions.

Section 2.04. Assignment and Transfer of Rights to RPS Attributes. Until such time as the NYGATS is available for purposes of transferring Certificates associated with RPS Attributes, the assignment and transfer (“Transfer”) of RPS Attributes to NYSERDA shall be accomplished through their inclusion on the Certification and Assignment of Rights Form, which must accompany each invoice; upon the availability of NYGATS, Transfer will be accomplished by the delivery of Certificates associated with each RPS Attribute to an account designated by NYSERDA. Seller acknowledges that, at the time of the execution of this Agreement, New York has begun the launch of NYGATS which will provide for the tracking, registration, and trading of Certificates. Seller shall register the Bid Facility in NYGATS and deliver the Certificates associated with each RPS Attribute, at the earliest time such Certificates become available for delivery, to an account designated by NYSERDA; Seller further agrees to transfer to the NYSERDA account any Certificates created by NYGATS corresponding to RPS Attributes previously transferred to NYSERDA by a Certification and Assignment of Rights Form, prior to the availability of NYGATS.

Section 2.05. Except as may be permitted under Section 2.11, Suspension of Performance, Seller agrees that it may not and shall not apply for or otherwise seek to achieve compliance under Section 242-8.7 (CO<sub>2</sub> budget units that co-fire eligible biomass) of the CO<sub>2</sub> Budget Trading Program (6 NYCRR Part 242), or any other state program operating as a part of the Regional Greenhouse Gas Initiative, on the basis of any MWh or emission of CO<sub>2</sub> or reduction in emissions of CO<sub>2</sub> or other benefit associated with RPS Attributes or for any activity constituting performance under this Agreement. NYSERDA will consider a modification of this prohibition if the treatment of the Bid Facility under CO<sub>2</sub> Budget Trading Program is revised or modified in a manner that will result in the actual or functional retirement of CO<sub>2</sub> allowances in

an equivalent quantity, and in a manner otherwise acceptable to NYSERDA and the objectives of the RPS and CO2 Budget Trading Programs.

Section 2.06. In the event that Seller becomes entitled to or must apply for or take some other action under any emission-trading, emissions recordation or other regime other than the NY RPS in order to secure a claim, title, credit, ownership, or rights of any type, nature or sort ("Title") to any RPS-eligible Attributes associated with Quantity Obligations, or any certification, registration, verification or other memorialization of the creation of such RPS-eligible Attributes by the Bid Facility to which Seller may be entitled, Seller shall (i) notify NYSERDA of such opportunity, and, if requested to do so by NYSERDA, Seller shall (ii) take all actions necessary to apply for and secure such Title, to the maximum extent to which Seller is entitled, (iii) provide NYSERDA with evidence of taking such action; and (iv) convey such Title to NYSERDA whenever so secured.

Section 2.07. NYSERDA's obligations under this Agreement are expressly conditioned on the eligibility of Seller's Bid Facility, at the time of execution of this Agreement and throughout the duration of the Contract Delivery Term, under the Main Tier eligibility rules and requirements, as such requirements existed on April 21, 2016, as originally stated at Appendix C to the September 24, 2004 Order and as amended by the attachment to the June 28, 2006 "Order on Customer Sited Tier Implementation," and as further defined and clarified by subsequent Orders, and upon compliance by Seller with the requirements of Exhibit E. NYSERDA and/or its designee shall have reasonable access to the Bid Facility for the purpose of verifying the continuing eligibility of the Bid Facility and its operation. Bid Facilities selected under this RFP will not be subject to subsequent changes in RPS eligibility rules; however, in the event that the Bid Facility fails to maintain eligibility consistent with the RPS requirements as they existed on April 21, 2016, such ineligibility will extend to the attributes emanating from the Bid Facility. See also Section 17.04 Permits and Approvals.

Section 2.08. Pending the availability of NYGATS, NYSERDA's obligation to purchase RPS Attributes and to make payment under this Agreement are conditional on the ability of Seller to demonstrate to the satisfaction of the New York State Department of Public Service that the creation of and title to the RPS-eligible Attributes is sufficiently verifiable for purposes of the New York Environmental Disclosure Program.

Section 2.09. Commercial Operation Milestone Date. NYSERDA's obligations to purchase RPS Attributes and to make payment under this Agreement are conditional on the commencement by the Bid Facility of Commercial Operation at a minimum of 80% of the Bid Capacity on or before the Commercial Operation Milestone Date. The Commercial Operation Milestone date shall be April 30, 2018. [Seller may elect to extend the Commercial Operation Milestone Date from April 30, 2018 to July 31, 2019], on condition that such election is made by written Notice to NYSERDA, on or before February 28, 2018, and that Seller provides to NYSERDA, one of the following:

- (1) Contract Security, in addition to the amounts provided under Section 15.01(a) and (b), below, in the amount of six dollars (\$6.00) multiplied by the Bid Quantity; or
- (2) if the electricity associated with the Quantity Obligation will be delivered into a market administered by the NYISO, proof that an interconnection agreement has been entered into

by the NYISO, the Connecting Transmission Owner, and the Seller or a legal representative of the Seller, with respect to the Bid Facility; or

- (3) if the Bid Facility intends to satisfy the Electricity Delivery Requirement through option 2 or 3 of Section 3.01, below, a comparable interconnection agreement has been entered into with all the necessary sites, service providers and parties that will be enable and permit the transmission of the energy from the Bid Facility to the point of its consumption.

Section 2.10. NYSERDA shall be free to sell, assign, transfer or otherwise subject to any encumbrance, any of the RPS Attributes or the right, title and interest to the NYGATS-created Certificates NYSERDA shall acquire under this Agreement, at any time and from time to time to any entity and on such terms and conditions as NYSERDA may desire. Any financial or other consideration received by NYSERDA from any such action shall inure solely to NYSERDA's benefit, to be applied as determined by NYSERDA as the Central Procurement Administrator of the RPS Program or a successor, and shall not affect the Seller's rights or obligations under the terms of this Agreement.

Section 2.11. Suspension of Performance.

- (a) Seller may, at its option, and upon sufficient notice to NYSERDA, suspend its obligation to deliver RPS-eligible Attributes to NYSERDA, in whole or in part, if such RPS-eligible Attributes are sold into the Voluntary Market in New York State or pursuant to a New York State Executive Order 111 or other mandated New York State governmental procurement. Such notice must be written, as provided under Section 19.01 hereto, must be provided to NYSERDA at least one month prior to the commencement of the requested suspension period, must identify the quantity of the RPS-eligible Attributes as to which delivery is to be suspended and the duration of such suspension, which shall be no less than six (6) months in duration. The quantity suspended may be either a specific percentage of the Quantity Obligation or a specific quantity of RPS Attributes to be suspended each month during the suspension period; in either case the quantity to be suspended must exceed the lower of (i) 10% of the Bid Quantity or (ii) one thousand (1,000) RPS-eligible Attributes per month. During each month during the period of suspension, Seller shall present documentation to NYSERDA establishing that the RPS-eligible Attributes created during the prior month as to which delivery has been suspended were either (a) settled into an account of an entity serving retail load in New York ("LSE") or otherwise accounted for as a part of the residual system mix for purposes of the Environmental Disclosure Program administered by the Department of Public Service, or (b) upon the full availability of NYGATS, documentation verifying the retirement of such Certificates associated with RPS Attributes into a voluntary customer account in New York, including accounts associated with compliance with a mandated New York State governmental procurement. For all quantities suspended, Seller shall apply to and shall pursue with the New York State Department of Environmental Conservation a Voluntary Renewable Energy Market Set Aside Allocation under 6 NYCRR Part 242, Subpart 242-5; CO2 Budget Trading Program. The suspension of RPS-eligible Attributes shall not relieve or excuse Seller from compliance with the Bid Facility Electricity Delivery Requirements set forth in Section 3.01 for suspended RPS Attributes. Seller shall continue to provide reports and data throughout the duration of any period of suspension. Seller will be required to submit invoices monthly regardless if 100% of the Bid Quantity is suspended or if there is no production for the previous

month. NYSERDA shall not be obligated to purchase or pay for suspended RPS-eligible Attributes during the suspension period; however, RPS-eligible Attributes suspended will be credited to the Quantity Obligation;

- (b) Seller may, at its option, and upon sufficient Notice to NYSERDA, suspend its obligation to deliver RPS-eligible Attributes to NYSERDA for purposes of participation in the program and process provided by Sections 242-6.5(b)(1) and 242-8.7 of the New York State CO<sub>2</sub> Budget Trading Program (CO<sub>2</sub> Program). Such Notice must be written, as provided under Section 19.01 hereto, and must be provided to NYSERDA at least one month prior to the commencement of the requested suspension period. Such Notice must identify the duration of such suspension, which shall be no less than six (6) months in duration; such suspension must be for the entire Quantity Obligation. Seller and NYSERDA agree that each RPS-eligible Attribute for which Seller's obligation is suspended under this Subsection shall be entirely surrendered to the CO<sub>2</sub> Program, notwithstanding that the CO<sub>2</sub> Program does not make any express claim to any individual attribute other than CO<sub>2</sub>. Should NYGATS or other automated tracking system enter operation during the suspension period, Seller agrees to cooperate with NYSERDA to accomplish the transfer of the affected RPS-eligible Attributes to a regulatory account designated by NYSERDA. The suspension of RPS-eligible Attributes shall not relieve or excuse Seller from compliance with the Delivery Requirement for suspended RPS Attributes. Seller will be required to submit invoices monthly regardless if 100% of the Bid Quantity is suspended or if there is no production for the previous month. NYSERDA shall not be obligated to purchase or pay for suspended RPS-eligible Attributes during the suspension period;
- (c) Seller shall continue to provide the reports required under Article VI hereto throughout the duration of any period of suspension under either (a) or (b) above. For purposes of the calculations contemplated under Article V hereto, RPS-eligible Attributes suspended under either (a) or (b) above will be credited to the Quantity Obligation.

Section 2.12. Verification/Metering. The Actual Production and Actual Eligible Production of the Bid Facility must be capable of accurate and verifiable measurement at the Injection Point by the local ISO, a transmission utility, public authority, municipal electric company, and in the case of a Customer-Sited Bid Facility, an independent third party through a Dedicated Generation Meter. Unless specifically agreed to by NYSERDA in writing, the Bid Facility must be separately metered and must be functionally represented by a single and discrete Injection Point.

Section 2.13. Dedicated Generation Meter. Seller must provide, install, and maintain a dedicated generation meter at the Injection Point that shall be an internet enabled electric meter that displays instantaneous AC power and cumulative total AC energy production and, at a minimum, can record cumulative total AC energy production of the Bid Facility on an hourly basis, store the hourly readings for at least 7 days, and can transmit recorded readings once per day to a NYSERDA designated Data Agent via e-mail, FTP, HTTP or Modbus TCP/IP. The meter must meet the American National Standards Institute (ANSI) C12.20, be Revenue grade with a +/- 0.2% accuracy, and be calibrated in the manner and frequency, and otherwise generally maintained in accordance with the manufacturer's recommendations. The meter must

also have battery backup to prevent the loss of data during power outages. Seller must provide, and maintain, an active internet connection to the meter throughout the Contract Delivery Term to support daily data transmissions. Data collected from the meter will be available to NYSERDA, and will be used by NYSERDA to verify the monthly Actual Eligible Production.

### Article III

#### Bid Facility Electricity Delivery Requirements.

Section 3.01. For all Bid Facilities, the electricity associated with the Quantity Obligation must be:

1. delivered into a market administered by the NYISO for end-use in New York State; or
2. delivered through a wholesale meter under the control of a utility, public authority or municipal electric company such that it can be measured, and such that consumption within New York State can be tracked and verified by such entity or by the NYISO; or
3. delivered through a Bid Facility Dedicated Generation Meter, which shall be approved by and subject to independent verification by NYSERDA, to a customer in New York State (excluding customers in the service territory of the Long Island Power Authority) whose electricity was obtained through the NYISO/utility system as of November 24, 2010.

For Bid Facilities seeking to satisfy the Electricity Delivery Requirement through options 2 or 3, above, all costs associated with measurement, tracking, and verification, to the satisfaction of NYSERDA and New York State Department of Public Service Staff, and participation in NYGATS must and will be borne by Seller. See also Section 2.12. Verification/Metering and Section 2.13 Dedicated Generation Meter.

Section 3.02. Bilateral Sales. Bilateral sales for electricity associated with the Quantity Obligation produced by the Bid Facility are permissible provided the Seller can demonstrate that the purchaser of the electricity associated with the Quantity Obligation is a New York State Load Serving Entity (LSE), or one or more New York State end-users.

### Article IV

#### Payment

Section 4.01. Invoices. Seller shall submit monthly invoices throughout the term of this Agreement for RPS Attributes created in the prior month during the Contract Delivery Term. Invoices shall be addressed to NYSERDA, "Attention: Accounts Payable," or submitted electronically to [invoices@nyserda.ny.gov](mailto:invoices@nyserda.ny.gov) with a copy to [xxx@nyserda.ny.gov]. Such invoices shall make reference to the Agreement number shown on page 1 of this Agreement. Such invoices shall include a statement of the amount due and payable by NYSERDA to Seller, which amount shall be calculated in accordance with Section 4.02. Pending the availability of NYGATS, all such invoices must and shall be accompanied by a completed Certification and Assignment of

Rights Form, in the form provided at Exhibit B hereto, and must otherwise demonstrate the Transfer of the RPS Attributes. All invoices must be accompanied by information and data, as specified in Section 6.01, sufficient for NYSERDA to verify the creation of the RPS Attributes and compliance with the Bid Facility Electricity Delivery Requirements and other requirements as may be outlined in this Agreement. Upon the availability of NYGATS, invoices should reflect the quantity of RPS-eligible Certificates Transferred to NYSERDA's designated account for the prior month, which shall determine the amount payable.

Section 4.02. Payment. NYSERDA will make payment to Seller of the amount of Quantity Obligation in whole MWh invoiced. NYSERDA will not pay for RPS Attributes beyond the maximum it is required to purchase under this Agreement, in accordance with Section 4.04. The maximum amounts payable in a given month shall be calculated as follows: the multiplicative product of (a) the Actual Eligible Production of the Bid Facility during the prior month; (b) the Bid Quantity Percentage; and (c) the Bid Price. Upon the availability of NYGATS, NYSERDA will not pay for any RPS Attribute for which Seller has not Transferred the associated Certificate to NYSERDA's designated account.

Section 4.03. Prompt Payment Policy. NYSERDA will make payments to the Seller in accordance with and subject to its Prompt Payment Policy Statement, attached hereto as Exhibit D. Such payments shall be made by check or wire transfer to an account designated by the Seller. NYSERDA will not pay any invoice not accompanied by a completed Certification and Assignment of Rights Form, and all information required in accordance with Section 6.01.

Section 4.04. Maximum Commitment/Limitation. The maximum number of RPS Attributes NYSERDA shall be obligated to purchase under this Agreement shall be equal to the Bid Quantity multiplied by the number of years in the Contract Delivery Term. The maximum aggregate amount payable by NYSERDA to Seller hereunder is (\$ \_\_\_\_\_ .00). NYSERDA shall not be obligated to purchase or make payment for, with respect to any Contract Year, RPS Attributes in excess of the Bid Quantity. Should Seller elect to suspend performance under Section 2.11, such maximum aggregate amounts will be modified by subtracting any periods of Suspension from the number of Contract Years, and by reducing the Bid Quantity by the number of RPS Attributes suspended. NYSERDA shall not be obligated to purchase or pay for suspended RPS-eligible Attributes during the suspension period.

## Article V

### Adjustments

Section 5.01. True-Up Adjustments. NYSERDA may adjust payments to subsequent invoices consistent with adjustments by NYGATS pursuant to its Operating Rules based on NYISO or other local control area billing settlement true-up procedures, based on actual metered production data measured at the Injection Point, actual and verified data reflecting compliance with the Bid Facility Electricity Delivery Requirements, and/or based on the number of RPS Attributes Transferred.

Section 5.02. Other Adjustments. NYSERDA may adjust its contractual Payment obligations under this Agreement under the following circumstances:

- (a) NYSERDA may adjust amounts payable to Seller to reflect any costs borne by NYSERDA, if any, for participation in any renewable energy attribute accounting system operating in the Bid Facility's local control area, including all fees and charges, if any, for the delivery, registration and/or retirement of the attributes or Certificates associated with each RPS Attribute into a NYSERDA account, inclusive of accounts in New York State.
- (b) Should the Bid Facility's Quantity Obligation fail to achieve 85% of the Bid Quantity for two (2) consecutive Contract Years, NYSERDA may at its option upon Notice to Seller modify the Contract by adjusting the Bid Quantity for the remainder of the Contract Delivery Term to equal the average Actual Annual Eligible Production of the two (2) Contract Years multiplied by the Bid Quantity Percentage.
- (c) Should Seller fail to reasonably demonstrate that the total dollar amount of Incremental Economic Benefits having accrued to New York as a result of the development, construction, modification, and operation of the Bid Facility through the first three (3) Contract Years of operation (Verified Total Dollars), divided by Installed Bid Capacity, is at least 85% of Expected Total Dollars divided by the Bid Capacity, NYSERDA may at its option upon Notice to Seller, modify the Contract by reducing the Bid Price payable for the remainder of the Contract Delivery Term. Such reduction in the Bid Price will be made by an amount equal to the percentage shortfall between the Verified Total Dollars divided by the Installed Bid Capacity compared to the Expected Total Dollars divided by the Bid Capacity.
- (d) Should the Installed Bid Capacity differ from the Bid Capacity, Seller agrees that NYSERDA may at its option upon Notice to Seller modify the Contract by adjusting the Bid Quantity, Bid Quantity Percentage, or other relevant terms to reflect the Installed Bid Capacity.

## Article VI

### Records and Reports

Section 6.01. Monthly Reports. Seller shall submit with each invoice generation data or access to generation data, measured at the Injection Point, in Microsoft Excel format or such other format to be agreed upon, and a Monthly Fuel Report, completed in accordance with Exhibit E. NYSERDA will also require the Seller to provide detailed monthly market accounting settlement or other pertinent data from the administrator(s) of the energy market into which energy from the Bid Facility was delivered, from the entity or party in control of any meter through which the energy associated with the Quantity Obligation was delivered, and from the administrator of any attribute accounting system operating in such control area. Seller may be required to waive confidentiality, as to NYSERDA, for the direct transfer to NYSERDA by an energy market administrator or the operator of the transmission and/or distribution system into which the energy from the Bid Facility is delivered of transactional and/or delivery information and data pertinent to the verification of RPS Attribute creation and electricity delivery. Should the Quantity Obligation of the Bid Facility be zero for any month Seller shall submit a statement stating such.

Section 6.02. Progress Reports. Beginning on the first such date following the Effective Date, and continuing through the commencement of the Contract Delivery Term, Seller shall provide quarterly written Progress Reports to NYSERDA, on March 1, June 1, September 1, and December 1, which reports shall be in letter form, and which shall describe at a minimum (1) Seller's progress in obtaining and securing all required environmental or other permits and/or local approvals; (2) the status of development and/or construction planning or activities with regard to the Bid Facility; (3) the status of the interconnection process between the Bid Facility and the administrator of the control area; (4) purchases, delivery, and/or installation of any major equipment associated with the Bid Facility, and (5) an estimated date for Commercial Operation. Such reports shall also include an updated Project Schedule Form (RFP 3257 Attachment C), copies of any permits or approvals granted and/or copies of any correspondence of any type denying or refusing any permit or approval. Upon NYSERDA's request, Seller shall also provide an independent engineers or similar third party's assessment of the long-term expected energy production of the Bid Facility.

Section 6.03. Economic Benefits Report. Seller shall submit a report including third party documentation demonstrating the actual Incremental Economic Benefits that resulted from the construction and operation of the Bid Facility. Such report should include copies of sufficient records and documentation relating to employment, purchases, and other payments necessary to demonstrate the economic benefits created by the Bid Facility under the categories and within the eligibility requirements listed in accordance with XI, A Section 3 of RFP 3257. Examples of acceptable documentation include but are not limited to, invoices with proof of payment, tax documentation, contracts, or similar documentation demonstrating the actualization of economic benefits in New York State. Seller will be required to submit such report within sixty (60) days of the third anniversary of the commencement of the Contract Delivery Term.

Section 6.04. Annual Reports. Seller shall submit, annually for the duration of the Contract Delivery Term, a detailed report identifying and describing the Incremental Economic Benefits actually created as a result of the development, operation and/or construction of the Bid Facility. Such report shall include the number of short and long-term jobs created including an accounting of total expenditures incurred for all short and long-term jobs, and shall identify, describe and quantify all payments made to any State, municipal or local governmental entity, any payments made for the usage of land or fuel purchases, and all in-state purchases made as a result of the development, construction, and operation of the Bid Facility. Such report shall be filed with NYSERDA within sixty (60) days of each anniversary of the commencement of the Contract Delivery Term. Such report shall also identify, describe, and quantify any and all Federal or local tax incentives received or awarded for the construction and/or operation of the Bid Facility including grants, government backed loans, tax credits or similar government sponsored financial assistance.

Section 6.05. Additional Documents. Within 10 business days of Notice from NYSERDA of selection under RFP 3257, Seller shall provide to NYSERDA:

- (a) certificates, dated as of the most recent practicable date prior to the Effective Date, issued by the [insert - jurisdiction of Seller's organization] Secretary of State confirming the corporate good standing of the Seller;

(b) a certificate of an appropriate officer of the Seller, dated as of the Effective Date, in form and substance reasonably satisfactory to NYSERDA and certifying: (1) the names and signatures of the officers of the Seller authorized to sign a Certification and Assignment of Rights Form and any other documents to be delivered hereunder, and (2) the accuracy and completeness of resolutions of the Seller, authorizing and approving all matters in connection with the transactions contemplated thereby.

Seller shall promptly provide NYSERDA with updated and corrected versions of the above-referenced certificates upon any change in the information provided therein.

Section 6.06. Maintenance of Records. The Seller shall keep, maintain, and preserve at its principal office throughout the term of the Agreement and for a period of seven (7) years following the expiration of this Agreement, full and detailed books, accounts, and records pertaining to Seller's performance under the Agreement, including without limitation, all bills, invoices, payrolls, subcontracting efforts and other data evidencing, or in any material way related to, the direct and indirect costs and expenses incurred by the Seller in the course of such performance.

## Article VII

### Audit

Section 7.01. Audit. NYSERDA shall have the right from time to time and at all reasonable times during the term of the Agreement and such period thereafter to inspect and audit any and all books, accounts and records pertaining to Seller's performance under this Agreement, at the office or offices of the Seller where they are then being kept, maintained and preserved. If such books, accounts and records are not kept at an office within the State of New York, within a reasonable time of a request by NYSERDA, Seller shall make such books, accounts and records available to NYSERDA at NYSERDA's offices or at an agreed upon location within the State of New York. Any payment made under this Agreement shall be subject to retroactive adjustment (reduction or increase) regarding amounts included therein which are found by NYSERDA on the basis of any audit of the Seller by an agency of the United States, the State of New York or NYSERDA not to constitute a properly invoiced amount.

Section 7.02. Eligibility Audit. NYSERDA may require periodic audits of the Bid Facility to verify that the Bid Facility remains eligible under the eligibility rules and requirements, as such requirements existed on April 21, 2016. Prior to any material modification of the Bid Facility, including but not limited to any modification that is expected to result in a change in the Nameplate Capacity of the Bid Facility, Seller shall provide NYSERDA with written Notice and will provide to NYSERDA a written description of the planned modification.

## Article VIII

### Assignments

Section 8.01. General Restrictions. Except as specifically provided otherwise in this Article VIII, the assignment, transfer, conveyance, subcontracting or other disposal of this Agreement or any of the Seller's rights, obligations, interests or responsibilities hereunder, in whole or in part, without the express consent in writing of NYSERDA shall be void and of no effect as to NYSERDA. Such consent shall not be unreasonably withheld.

Section 8.02. Seller may, without NYSERDA's prior written consent, grant a security interest in or assign this Agreement as collateral in connection with financing arrangements; Seller shall promptly notify NYSERDA of the completion and the nature of any such grant or assignment.

Section 8.03. Either Party may, upon written notice, assign its rights and obligations hereunder, or transfer such rights and obligations by operation of law, to any entity with which or into which such Party shall merge or consolidate or to which such Party shall transfer all or substantially all of its assets, provided that such other entity agrees to be bound by the terms hereof and provided further, that such other entity's creditworthiness is comparable to or higher than that of such Party at the time this Agreement was executed and such Party is not relieved of any obligation or liability hereunder as a result of such assignment.

## Article IX

### Seller's Warranties and Guarantees

Section 9.01. As a material inducement to NYSERDA to enter into this Agreement, Seller makes the following warranties and guarantees, as of the Effective Date, all of which shall survive the execution and delivery of this Agreement:

- (a) (1) that Seller is [corporation/limited liability company/partnership] duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization; (2) has or will have all requisite corporate power, and has or will have all material governmental permits necessary to own its assets or lease and operate its properties and carry on its business as now being or as proposed to be conducted, to construct, finance, own, maintain and operate the Bid Facility, to execute and deliver this Agreement, and to consummate the transactions contemplated herein; and (3) is qualified to do business and is in good standing in all jurisdictions in which the nature of the business conducted by it makes such qualification necessary;
- (b) that the execution, delivery and performance by Seller, the entry into this Agreement by Seller, and the consummation of the transactions contemplated by this Agreement: (1) have been duly authorized by all requisite corporate action (including any required action of its members); and (2) will not (i) violate any applicable provision of law, statute, rule, regulation or order of any governmental agency or any provision of the limited liability

company agreement or other governing documents of Seller; (ii) violate, conflict with, result in a breach of or constitute (alone or with notice or lapse of time or both) a default or an event of default under any indenture, agreement (including the respective limited liability company agreements of Seller), mortgage, deed of trust, note, lease, contract or other instrument to which Seller is a party or by which it or any of its property is bound; or (iii) result in the creation or imposition of any lien upon any property or assets of the Seller;

- (c) that the Bid Facility is or will be eligible under the Orders and that it will remain so throughout the Contract Delivery Term
- (d) that the Certificates associated with RPS Attributes, as to which right and title is to be transferred to NYSERDA under this Agreement, are eligible and compliant with the Renewable Portfolio Standard;
- (e) that the Certificates associated with RPS Attributes, as to which right and title is to be transferred to NYSERDA under this Agreement, are free and clear of any liens, encumbrances and/or defects of title;
- (f) that the Certificates associated with RPS Attributes, as to which right and title is to be Transferred to NYSERDA under this Agreement shall not have otherwise been, nor will be sold, retired, claimed or represented as part of electricity output or sales, or used to satisfy obligations in any other jurisdiction;
- (g) that Seller will comply with all general and special Federal, State, municipal and local laws, ordinances and regulations, if any, that may in any way affect the performance of this Agreement;
- (h) that this Agreement and each Certification and Assignment of Rights Form will be duly executed and delivered by Seller and will constitute the legal, valid and binding obligation of Seller enforceable against Seller in accordance with the terms thereof;
- (i) that the Seller has no knowledge of any patent issued under the laws of the United States or any other matter which could constitute a basis for any claim that Seller's performance under this Agreement will infringe any patent or otherwise interfere with any other right of any person;
- (j) as of the Effective Date, that there are no existing undisclosed or threatened legal actions, claims, or encumbrances, or liabilities that may adversely affect Seller's performance of this Agreement or NYSERDA's rights hereunder;
- (k) that Seller has no knowledge that any information or document or statement furnished by the Seller in connection with this Agreement contains any untrue statement of a material fact or omits to state a material fact necessary to make the statement not misleading;
- (l) that Seller shall not, and shall not cause or permit any voluntarily abandonment of the development, construction or operation of the Facility; and

- (m) Seller certifies that all information provided to NYSERDA with respect to State Finance Law Sections 139-j and 139-k is complete, true and accurate.

## Article X

### NYSERDA's Warranties and Guarantees

Section 10.01. As a material inducement to Seller to enter into this Agreement, NYSERDA makes the following warranties and guarantees, as of the Effective Date all of which shall survive the execution and delivery of this Agreement:

- (a) that NYSERDA is an instrumentality of the State of New York and a public authority and public benefit corporation, created under the New York State Public Authorities Law, validly existing and in good standing under the laws of the State of New York;
- (b) that NYSERDA has all necessary power and authority to execute and deliver this Agreement and all other agreements contemplated herein and hereby and to consummate the transactions contemplated hereby and thereby. The execution and delivery by NYSERDA of this Agreement and all other agreements contemplated herein and hereby and the consummation of the transactions contemplated hereby and thereby have been or, if not yet executed and delivered, will be when executed and delivered, and no other actions or proceedings on the part of NYSERDA are necessary to authorize this Agreement or any other agreement contemplated herein and hereby or the consummation of the transactions contemplated hereby and thereby;
- (c) that the execution, delivery and performance by NYSERDA of this Agreement will not (1) violate any applicable provision of law, statute, rule, regulation or order of any governmental agency or, any provision of the Public Authorities Law; (2) violate, conflict with, result in a material breach of or constitute (alone or with notice or lapse of time or both) a material default or event of default under any indenture, agreement, mortgage, deed of trust, note, lease, contract or other instrument to which NYSERDA is a party or by which NYSERDA or any of its property is bound; or (3) result in the creation or imposition of any lien upon any property or assets of NYSERDA. This Agreement will not conflict with any other agreement or contract to which NYSERDA is a party;
- (d) that this Agreement has been duly executed and delivered by NYSERDA and constitutes the legal, valid and binding obligation of NYSERDA enforceable against NYSERDA in accordance with the terms thereof;
- (e) that NYSERDA is familiar with and in compliance with all general and specific laws, except where the failure to so comply would not result in a material adverse effect on NYSERDA's ability to perform its obligations; and
- (f) that there is no action, suit or claim at law or in equity, or before or by a governmental authority pending or, to the best knowledge of NYSERDA after due inquiry, threatened against NYSERDA or affecting any of its properties or assets which could reasonably be

expected to result in a material adverse effect on NYSERDA's ability to perform its obligations.

## Article XI

### Indemnification

Section 11.01. Indemnification. Seller shall protect, indemnify and hold harmless NYSERDA and the State of New York from and against all liabilities, losses, claims, damages, judgments, penalties, causes of action, costs and expenses (including, without limitation, reasonable attorneys' and/or experts' fees and expenses) imposed upon or incurred by or asserted against NYSERDA or the State of New York resulting from, arising out of or relating to Seller's performance under this Agreement. The obligations of Seller under this Article shall survive any expiration or termination of this Agreement, and shall not be limited by any enumeration herein of required insurance coverage.

## Article XII

### Insurance

Section 12.01. Maintenance of Insurance; Policy Provisions. The Seller, at no cost to NYSERDA, shall maintain or cause to be maintained, commencing with the Effective Date and continuing throughout the duration of the Contract Delivery Term, insurance of the types and in the amounts specified in Section 12.02 (Types of Insurance). All such insurance shall be evidenced by insurance policies, each of which shall:

- (a) name or be endorsed to cover NYSERDA and the State of New York as additional insureds;
- (b) provide that such policy may not be cancelled or modified until at least 30 days after receipt by NYSERDA of written notice thereof; and
- (c) be reasonably satisfactory to NYSERDA in all other respects.

Section 12.02. Types of Insurance. Seller shall be required to maintain commercial general liability insurance for bodily injury liability, including death, and property damage liability, incurred in connection with the performance of this Agreement, with minimum limits of [insert: \$2,000,000 or \$200,000 per/MW Nameplate Capacity, whichever is lower] in respect of claims arising out of personal injury or sickness or death of any one person; [insert \$2,000,000 or \$200,000 per/MW Nameplate Capacity, whichever is lower] in respect of claims arising out of personal injury, sickness or death in any one accident or disaster; and [insert \$2,000,000 or \$200,000 per/MW Nameplate Capacity, whichever is lower] in respect of claims arising out of property damage in any one accident or disaster.

Section 12.03. Delivery of Policies; Insurance Certificates. Within 30 days of the effective date of this Agreement, Seller shall deliver to NYSERDA certificates of insurance issued by the respective insurers, indicating the Agreement number thereon, evidencing the insurance required by this Article XII and bearing notations evidencing the payment of the premiums thereon or accompanied by other evidence of such payment satisfactory to NYSERDA. In the event that any policy furnished or carried pursuant to this Article XII will expire on a date prior to the expiration date of this Agreement, Seller, not less than 15 days prior to such expiration date, shall deliver to NYSERDA certificates of insurance evidencing the renewal of such policies, and Seller shall promptly pay all premiums thereon due. In the event of threatened legal action, claims, encumbrances, or liabilities that may affect NYSERDA hereunder, or if deemed necessary by NYSERDA due to events rendering a review necessary, upon request Seller shall deliver to NYSERDA a certified copy of each policy.

## Article XIII

### Events of Default

Section 13.01. Event of Default. For the purposes of this Agreement, “Event of Default” shall mean any of the following:

- (a) Representations and Warranties. Any representation or warranty made in this Agreement that shall prove to have been false or misleading in any material respect as of the time made or deemed to be made; or
- (b) Other Obligations. A Party shall default in the performance of any of its obligations under this Agreement and such default shall continue unremedied for a period of 30 days after the defaulting Party receives Notice or otherwise has actual knowledge thereof; or
- (c) Voluntary Proceedings. A Party shall (a) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee or liquidator of itself or of all or a substantial part of its property; (b) make a general assignment for the benefit of its creditors; (c) commence a voluntary case under the Bankruptcy Code; (d) file a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding-up, or composition or readjustment of debts; (e) fail to convert in a timely and appropriate manner, or acquiesce in writing to, any petition filed against it in an involuntary case under the Bankruptcy Code; or (f) take any corporate action for the purpose of effecting any of the foregoing; or
- (d) Involuntary Proceedings. A proceeding or case shall be commenced against a Party, without its application or consent, in any court of competent jurisdiction, seeking (a) its liquidation, reorganization, dissolution or winding-up, or the composition or readjustment of its debts; (b) the appointment of a trustee, receiver, custodian, liquidator or the like of all or any substantial part of its assets; or (c) similar relief under any law relating to bankruptcy, insolvency, reorganization, winding-up, or composition or adjustment of debts, and such proceeding or case shall continue undismissed, or an order, judgment or decree approving or ordering any of the foregoing shall be entered and continue unstayed

and in effect, for a period of 60 or more days; or an order for relief against a Party, shall be entered in an involuntary case under the Bankruptcy Code; or

- (e) Judgments. A judgment or judgments for the payment of money in the amount of \$1,000,000 or more shall be rendered by a court or courts against Seller, and the same shall not be paid or otherwise discharged for a period of more than 60 days unless such judgment has been stayed, released or vacated; or
- (f) Unauthorized Transfer. The transfer or attempted transfer by Seller to any transferee other than NYSERDA of any RPS Attribute or Certificate associated with this Agreement, except as authorized pursuant to Section 2.11 of this Agreement; or
- (g) Commercial Operation. Failure of the Bid Facility to commence Commercial Operation at a minimum of 80% of the Bid Capacity on or before the Commercial Operation Milestone Date (April 30, 2018, unless extended pursuant to Article II, Section 2.09 of this Agreement); or
- (h) Abandonment. Seller's abandonment of the Facility or its intentional delay of completion of construction in connection therewith; or
- (i) Failure to Produce. The failure of the Quantity Obligation of any Bid Facility to achieve at least 65% of the Bid Quantity during any Contract Year; or
- (j) Failure to Transfer RPS Attributes. The failure by Seller to Transfer rights to NYSERDA in the RPS Attributes associated with the Quantity Obligation of the Bid Facility, and the Certificates associated with the RPS Attributes, in conformity with Article II; or
- (k) Failure to Provide Additional Contract Security. Failure by Seller to provide to NYSERDA, on or before May 2, 2017, additional Contract Security, in an amount equal to six dollars (\$6.00) per MWh multiplied by the Bid Quantity (See Section 15.01(b)).

Section 13.02. Effect of an Event of Default. In addition to any other remedy available to it under this Agreement or under applicable Law, upon any occurrence of an Event of Default, the non-defaulting Party shall be entitled to suspend performance of its obligations under this Agreement until the earlier of such time as (a) such Event of Default has been cured, or (b) the non-defaulting Party has elected to terminate this Agreement pursuant to Article XIV below.

## Article XIV

### Termination

Section 14.01. Termination. This Agreement may be terminated:

- (a) at any time by either NYSERDA or Seller if: (1) an Event of Default occurs (and following the expiration of any applicable cure period), (2) the Party seeking to terminate

this Agreement hereunder is the non-defaulting Party, and (3) the non-defaulting Party has not waived such Event of Default in writing;

- (b) at any time by the mutual written consent of Seller and NYSERDA;
- (c) unless otherwise mutually agreed upon by NYSERDA and Seller in writing, on the expiration of the Contract Delivery Term (subject to Section 18.03 of this Agreement);
- (d) by Seller, upon each 30-month anniversary of the commencement date of the Contract Delivery Term, exercisable by Seller upon demonstration that Seller is unable to secure a continuous bio fuel supply at a price that supports this Agreement. Notice of Seller's intention to terminate under this subsection must be received by NYSERDA at least 30 days prior to each such anniversary date;
- (e) by NYSERDA in the event it is found that the certification filed by the Seller in accordance with State Finance Law Sections 139-j and 139-k was intentionally false or intentionally incomplete;
- (f) by NYSERDA in the event it is found that the certification filed by the Seller in accordance with New York State Tax Law Section 5-a was intentionally false when made.

Section 14.02. Effect of Termination. Except as otherwise set forth in Section 18.03 below, in the event of a termination of this Agreement as provided in Section 14.01 above, neither Party shall have any further right or obligation hereunder. In addition, the Parties hereto agree that , in the case of a termination based on the default of Seller, irreparable damage would occur in the event that NYSERDA could not obtain rights to RPS Attributes pursuant to this Agreement from the date of Event of Default in which Seller was the defaulting party, and accordingly, each Party hereby agrees that NYSERDA shall be entitled to elect to compel specific performance of this Agreement to compel the Transfer of all RPS-eligible Attributes that the Bid Facility produces following the date of any termination for such an Event of Default in accordance with the terms hereof, including Payment, together with any other remedy at law or equity available to NYSERDA in connection therewith, without the necessity of demonstrating the inadequacy of money damages. Notwithstanding the foregoing, for any termination by NYSERDA or Seller prior to the date of commencement of Commercial Operations, NYSERDA shall be entitled only to Stipulated Damages pursuant to Article XV.

Section 14.03. Good Faith Negotiation. Both Parties agree that, should any dispute arise during the term of this Agreement, the Parties will make a good faith, though non-binding effort to reconcile any difference or dispute before the filing of an action in any court.

## Article XV

### Contract Security

Section 15.01. (a) Within ten (10) days of Notice from NYSERDA of selection under RFP 3257 unless otherwise agreed to by NYSERDA, Seller shall provide to NYSERDA Contract

Security, in the form of cash, certified funds, or a Letter of Credit conforming to the requirements below, in an amount equal to the product of (1) Bid Quantity and (2) nine dollars (\$9.00).

**NYSERDA may rescind and cancel the award to Bidder under RFP 3257 should Bidder/Seller fail to provide Contract Security within such 10-day period;** (b) on or before May 2, 2017, Seller must provide additional Contract Security in an amount equal to six dollars \$6.00 multiplied by the Bid Quantity. **Failure to provide the additional Contract Security by May 2, 2017 will constitute a default and may result in termination of this Agreement;** (c) on or before February 28, 2018, Seller may elect to extend the Commercial Operation Milestone Date from April 30, 2018 to July 31, 2019 by providing to NYSERDA one of the following: Contract Security, in addition to the amounts provided under “a” and “b,” above, in the amount of \$6.00 per MWh multiplied by the Bid Quantity; for Bid Facilities from which the electricity associated with the Quantity Obligation will be delivered into a market administered by the NYISO, proof that an interconnection agreement has been entered into by the NYISO, the Connecting Transmission Owner, and the Bidder or a legal representative of the Bidder, with respect to the Bid Facility; for Bid Facilities seeking to satisfy the electricity delivery requirement through options 2 or 3 of Section XXI; A, proof that a comparable interconnection agreement has been entered into with all the necessary sites, service providers and parties that will be enable and permit the transmission of the energy from the Bid Facility to the point of its consumption.

Section 15.02. Letter of Credit. A Letter of Credit shall be a clean unconditional and irrevocable standby letter of credit in favor of NYSERDA as beneficiary, issued for direct payment by a bank which is a member of the New York Clearinghouse Association, substantially in the form of the letter of credit attached hereto as Exhibit C (“Letter of Credit”), in a face amount equal to the Contract Security amount, and which Letter of Credit shall provide that the issuing bank will pay to NYSERDA amounts in aggregate up to that same face amount upon presentation of only the Sight Draft in the amount to be drawn and the Payment Certificate, in the form of Annex A and Annex B, respectively, to the Letter of Credit, and have an expiration date not shorter than one (1) year. Should the Bid Facility not have commenced Commercial Operation by a date 30 days prior to the expiration date of the letter of Credit, and Seller not having provided NYSERDA or arranged with NYSERDA to provide a substitute Letter of Credit prior to such expiration, NYSERDA shall be thereupon entitled to draw on the Letter of Credit for the full amount then outstanding and the funds received shall be held by NYSERDA until a substitute Letter of Credit has been provided, or for application against subsequent obligations of Seller.

Section 15.03. Replacement. Any assignee within Article VIII of this Agreement shall, simultaneously with its receipt of the assignment, deliver to NYSERDA a Replacement Letter of Credit meeting the requirements of this Article, and NYSERDA shall, within twenty (20) business days after receipt of a compliant Replacement Letter of Credit, return the original Letter of Credit to Seller. Upon the failure of an assignee to deliver a compliant Replacement Letter of Credit to NYSERDA simultaneously with its receipt of the assignment, NYSERDA shall be thereupon entitled to draw on the Letter of Credit for the full amount then outstanding and the funds received shall be held by NYSERDA for application against subsequent obligations of Seller and/or the assignee under this Agreement.

Section 15.04. Refund of Security. Amounts provided by Seller as Contract Security will be refunded to Seller by NYSERDA as follows:

- (a) In their entirety if the Installed Bid Capacity is equal to or greater than the Bid Capacity and upon receipt of notice from the New York State Department of Public Service that Operational Certification has been granted for the Bid Facility.
- (b) At a prorated amount if the Installed Bid Capacity is less than the Bid Capacity. Such amount that will be refunded, expressed as a percentage of the total Contract Security, will be equal to the Installed Bid Capacity divided by the Bid Capacity and upon receipt of notice from the New York State Department of Public Service that Operational Certification has been granted for the Bid Facility.

Section 15.05. Retention of Security. Amounts provided by Seller as Contract Security will be retained by NYSERDA as follows:

- (a) In their entirety if Seller fails to provide to NYSERDA, on or before May 2, 2017, Contract Security in the amount required under Section 15.01(b), above.
- (b) At a prorated amount if the Installed Bid Capacity is less than the Bid Capacity. Such amount that will be retained, expressed as a percentage of the total Contract Security, will be equal to the Bid Capacity minus the Installed Bid Capacity divided by the Bid Capacity.

Section 15.06. Stipulated Damages. NYSERDA and Seller hereby agree, acknowledge and stipulate that NYSERDA's retention of amounts provided by Seller as Contract Security pursuant to Article XV, in the proportions stated within this Article, is fair and reasonable under the circumstances and in light of the uncertainty and inability to adequately quantify the harm that would result to NYSERDA as a result of the events that permit NYSERDA to retain such amounts of the Contract Security.

## Article XVI

### Force Majeure

Section 16.01. Force Majeure. Neither party hereto shall be liable for any failure or delay in the performance of its respective obligations hereunder if and to the extent that such delay or failure is due to a cause or circumstance beyond the reasonable control of such party, including, without limitation, acts of God or the public enemy, expropriation or confiscation of land or facilities, compliance with any law, order or request of any Federal, State, municipal or local governmental authority, acts of war, rebellion or sabotage or damage resulting therefrom, fires, floods, storms, explosions, accidents, riots, or strikes. Variability in the frequency or force of the wind, of rainfall, or of water levels will in no event constitute force majeure events. Failure by Seller to obtain or secure any permit or approval or delay in obtaining any permit or approval of any sort with regard to Seller's performance under the Agreement shall not constitute a force majeure event.

## Article XVII

### Compliance with Certain Laws

Section 17.01. Governing Law; Venue. This Agreement shall be governed by, and construed in accordance with the laws of the State of New York applicable to contracts executed and to be performed in New York State without regard to its conflicts of laws principles. The parties irrevocably acknowledge and accept that all actions arising under or relating to this Agreement, and the transactions contemplated hereby and thereby shall be brought exclusively in a United States District Court or New York State Court located in Albany, New York having subject matter jurisdiction over such matters, and each of the Parties hereby consents to and accepts such personal jurisdiction of, and waives any objection as to the laying of venue in, such courts for purposes of such action.

Section 17.02. Laws of the State of New York. Seller shall comply with all of the requirements set forth in Exhibit A hereto.

Section 17.03. All Legal Provisions Deemed Included. It is the intent and understanding of the Seller and NYSERDA that each and every provision of law required by the laws of the State of New York to be contained in this Agreement shall be contained herein, and if, through mistake, oversight or otherwise, any such provision is not contained herein, or is not contained herein in correct form, this Agreement shall, upon the application of either NYSERDA or the Seller, promptly be amended so as to comply strictly with the laws of the State of New York with respect to the inclusion in this Agreement of all such provisions.

Section 17.04. Permits and Approvals. The Seller shall be responsible to obtain all applicable permits and regulatory approvals that may be required in order to develop and/or operate the Bid Facility over the duration of the Contract Delivery Term. Neither the RPS Program nor selection under this RFP in any way replaces or modifies the necessity or applicability of any permit or approval process by any jurisdiction including SEQRA. NYSERDA's obligations to make payments to Seller will be conditional on the acquisition of all such permits and approvals. Upon request by NYSERDA Seller must demonstrate such acquisition and/or provide copies of all permits and approvals acquired. Seller shall provide prompt Notice to NYSERDA of the initiation of any criminal or regulatory investigation, hearing, proceeding, or review process ("Process") by any federal or State entity regarding any actual or alleged violation of any permit or approval obtained or applied for with respect to the Bid Facility, as well as of any modification, penalty and/or fine that may be imposed or occur as a result of such a Process or violation.

Section 17.05. Other Legal Requirements. The references to particular laws of the State of New York in this Article and elsewhere in this Agreement are not intended to be exclusive and nothing contained in such Article, Exhibit and Agreement shall be deemed to modify the obligations of the Seller to comply with all legal requirements.

## Article XVIII

### Additional Provisions

Section 18.01. Forward Contract. Each Party represents and warrants to the other that it is a “forward contract merchant” within the meaning of the United States Bankruptcy Code, that this Agreement is a “forward contract” within the meaning of the United States Bankruptcy Code, and that the remedies identified in this Agreement shall be “contractual rights” as provided for in 11 U.S.C. § 556 as that provision may be amended from time to time.

Section 18.02. Taxes. Seller shall be responsible for and obligated to pay all present and future taxes, fees and levies that may be assessed by any entity upon the Seller's provision of RPS Attributes to NYSERDA, or with respect to the creation of the RPS Attributes and/or the energy with which they are associated, up to the Delivery Point, and, if any, for the delivery and registration and/or retirement of the attributes or Certificates associated with each RPS Attribute into the NYSERDA account.

Section 18.03. Term. Unless terminated earlier under this Article, this Agreement shall expire upon the expiration of the Contract Delivery Term, provided that payment has been made for all RPS Attributes as to which a Certification and Assignment of Rights Form has been delivered to NYSERDA. Upon such date or upon earlier Termination of this Agreement under Article XIV, neither Party shall have any further obligation to the other, except that Sections 11.01, 17.01, 20.01, 21.02, 21.03, 21.04, and NYSERDA's Payment obligation under Article IV shall survive.

Section 18.04. Waiver. Either Party to this Agreement may (a) extend the time for the performance of any of the obligations or other acts of the other Party, (b) waive any inaccuracies in the representations and warranties of the other Party contained herein or in any document delivered by the other Party pursuant hereto, or (c) waive compliance with any of the agreements or conditions of the other party contained herein. Any such extension or waiver shall be valid only if set forth in an instrument in writing signed by the Party to be bound thereby. Any waiver of any term or condition shall not be construed as a waiver of any subsequent breach or a subsequent waiver of the same term or condition, or a waiver of any other term or condition, of this Agreement. No provision of this Agreement will be deemed to have been waived unless the waiver is in writing; no delay by NYSERDA in exercising its rights hereunder, including the right to terminate this Agreement, shall be deemed to constitute or evidence any waiver by NYSERDA of any right hereunder. The rights granted in this Agreement are cumulative of every other right or remedy that the enforcing Party may otherwise have at law or in equity or by statute.

Section 18.05. Independent Contractor. The status of the Seller under this Agreement shall be that of an independent contractor and not that of an agent, and in accordance with such status, Seller and its respective officers, agents, employees, representatives and servants shall at all times during the term of this Agreement conduct themselves in a manner consistent with such status and by reason of this Agreement shall neither hold themselves out as, nor claim to be acting in the capacity of, officers, employees, agents, representatives or servants of NYSERDA nor make any claim, demand or application for any right or privilege applicable to NYSERDA,

including, without limitation, rights or privileges derived from workers' compensation coverage, unemployment insurance benefits, social security coverage and retirement membership or credit.

Section 18.06. Severability. If any provision of this Agreement shall be declared by any court of competent jurisdiction to be illegal, void or unenforceable, all other provisions of this Agreement shall not be affected and shall remain in full force and effect. If any provision of this Agreement is so broad as to be unenforceable, that provision shall be interpreted to be only so broad as will enable it to be enforced.

Section 18.07. Seller Expense. Seller shall, at its own expense, make all arrangements necessary to: (1) register the Bid Facility and Transfer Certificates to NYSERDA through NYGATS, and (2) interconnect the Bid Facility with a transmission or distribution system and to comply with the Bid Facility Electricity Delivery Requirements. This requirement encompasses Seller's purchasing or arranging for all services including without limitation transmission, ancillary services, any control area services, line losses and transaction fees necessary to deliver energy to the New York Control Area, in accordance with all rules and protocols of the NYISO, throughout the Contract Delivery Term.

Section 18.08. Environmental Disclosure. The Parties agree that, at the time of the execution of this Agreement, New York does not employ any registry for the tracking, registration, or trading of renewable or environmental attributes or credits, but rather has instituted the Environmental Disclosure Program, under which the New York State Department of Public Service will conduct Conversion Transactions to accomplish verification of the transactions consummated hereunder. In the event that an attribute or credit registry is adopted in the future, Seller and NYSERDA agree to: (1) take such steps as are required under such system to continue to transfer RPS Attributes to NYSERDA in accordance with the terms of this Agreement; and (2) amend this Agreement as needed to effect its intent and to comply with any requirements of such attribute or credit registry. Should the PSC create, sanction, adopt or begin participation in a tracking system for accounting for attributes or Certificates associated with generation in the New York Control Area, Seller shall deliver the attributes or Certificates associated with each RPS Attribute to an account designated by NYSERDA.

Section 18.09. Covenant. Seller hereby covenants and promises that the Bid Facility is or will be eligible under the Orders in effect as of April 21, 2016 and that it will remain so throughout the Contract Delivery Term.

## Article XIX

### Notices, Entire Agreement, Amendment, Counterparts

#### Section 19.01. Notices.

- (a) All notices, requests, consents, approvals and other communications which may or are required to be given by either party to the other under this Agreement shall be in writing and shall be transmitted either:

- (1) via certified or registered United States mail, return receipt requested;

- (2) by personal delivery;
- (3) by expedited delivery service; or
- (4) by e-mail, return receipt requested.

Such notices shall be addressed as follows, or to such different addresses as the parties may from time-to-time designate as set forth in paragraph (c) below:

To Seller:                      Company  
  Attn:  
  Name  
  Address Line 1  
  Address Line 2  
  City, State Zip code  
  E:mail Address:

To NYSERDA:                    NYSERDA  
  Attn: Office of the General Counsel  
  17 Columbia Circle  
  Albany, New York 12203-6399  
  E:mail address: [pete.keane@nyserda.ny.gov](mailto:pete.keane@nyserda.ny.gov)

- (b) Any such notice shall be deemed to have been given either at the time of personal delivery or, in the case of expedited delivery service or certified or registered United States [or Canadian] mail, as of the date of first attempted delivery at the address and in the manner provided herein, or in the case of facsimile transmission or email, upon receipt of an email acknowledgement of receipt.
- (c) The parties may, from time to time, specify any new or different address in the United States [or Canada] as their address for purpose of receiving notice under this Agreement by giving fifteen (15) days written notice to the other party sent in accordance herewith. The parties agree to mutually designate individuals as their respective representatives for the purposes of receiving notices under this Agreement. Additional individuals may be designated in writing by the parties for purposes of implementation and administration/billing, resolving issues and problems and/or for dispute resolution.

Section 19.02. Entire Agreement; Amendment. This Agreement embodies the entire agreement and understanding between NYSERDA and the Seller and supersedes all prior agreements and understandings relating to the subject matter hereof. Except as otherwise expressly provided for herein, this Agreement may be amended, modified, changed, waived, discharged or terminated only by an instrument in writing, signed by the party against which enforcement of such amendment, modification, change, waiver, discharge or termination is sought.

Section 19.03. Counterparts. This Agreement may be executed in counterparts each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument.

## Article XX

### Publicity

Section 20.01. Publicity. Seller and/or the Bid Facility owner will collaborate with NYSERDA's Communications Unit, or RPS program staff, with regard to the preparation of any press release, public announcement, publication or media interview with respect to the Parties' entry into this Agreement or the subject matter thereof or which concerns NYSERDA or the RPS Program. Staff can be contacted by calling 518-862-1090. In any such press release, public announcement publication, or media interview Seller and/or the Owner of the Bid Facility and/or its employees shall credit NYSERDA and the funding participation of the Renewable Portfolio Standard in the activities of the Bid Facility. Seller will not represent that positions taken or advanced by Seller represent the opinion or position of NYSERDA or the State of New York.

## Article XXI

### Confidentiality

Section 21.01. In order to enable NYSERDA and the administrator of the New York State Environmental Disclosure Program to verify delivery of RPS Attributes, NYSERDA will require the Seller to provide detailed monthly market accounting settlement or other pertinent data from the administrator(s) of the energy market and/or the operator of the transmission/distribution utility into which energy from the Bid Facility was produced and/or delivered. Seller will be required to waive confidentiality, as to NYSERDA, for the direct transfer to NYSERDA by such entities of transactional and/or delivery information and data pertinent to the verification of RPS Attribute and associated electricity delivery.

Section 21.02. Freedom of Information Law. Seller acknowledges that NYSERDA is subject to and must comply with the requirements of New York's Freedom of Information Law ("FOIL;" see Public Officers' Law Article 6).

Section 21.03. Claim of Confidentiality. Information of any tangible form including any document that Seller wishes to be protected from disclosure to third parties, including any information provided as a part of a Bid Proposal Package submitted in response to RFP 3257, must be marked "Confidential" or "Proprietary" at the time such information is provided to NYSERDA.

Section 21.04. Trade Secrets/Commercial Information. The FOIL Law (Public Officers Law § 87(d)(2)) provides an exception to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." If NYSERDA receives a request from a third party for information or a document received from Seller and which has been marked "Confidential" or "Proprietary," NYSERDA will process such request under the procedures provided by NYSERDA's FOIL regulations.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed and delivered by their duly authorized representatives.

Seller:

NEW YORK STATE ENERGY RESEARCH  
AND DEVELOPMENT AUTHORITY

By \_\_\_\_\_

By \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

STATE OF \_\_\_\_\_ )

) SS:

COUNTY OF \_\_\_\_\_ )

On the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, before me, the undersigned, personally appeared \_\_\_\_\_, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person on behalf of which the individual(s) acted, executed the instrument.

\_\_\_\_\_  
Notary

## EXHIBIT A

REVISED 5/12

### STANDARD TERMS AND CONDITIONS FOR ALL NYSERDA AGREEMENTS

(Based on Standard Clauses for New York State Contracts and Tax Law Section 5-a)

The parties to the Agreement agree to be bound by the following clauses which are hereby made a part of the Agreement:

1. NON-DISCRIMINATION REQUIREMENTS. To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is an Agreement for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this Agreement shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this Agreement. If this is a building service Agreement as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this Agreement and forfeiture of all moneys due hereunder for a second subsequent violation.

2. WAGE AND HOURS PROVISIONS. If this is a public work Agreement covered by Article 8 of the Labor Law or a building service Agreement covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law. Additionally, effective April 28, 2008, if this is a public work contract covered by Article 8 of the Labor Law, the Contractor understands and agrees that the filing of payrolls in a manner consistent with Subdivision 3-a of Section 220 of the Labor Law shall be a condition precedent to payment by NYSERDA of any NYSERDA-approved sums due and owing for work done upon the project.

3. NON-COLLUSIVE BIDDING REQUIREMENT. In accordance with Section 2878 of the Public Authorities Law, if this Agreement was awarded based upon the submission of bids, Contractor warrants, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further warrants that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to NYSERDA a non-collusive bidding certification on Contractor's behalf.

4. INTERNATIONAL BOYCOTT PROHIBITION. If this Agreement exceeds \$5,000, the Contractor agrees, as a material condition of the Agreement, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the Federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the Agreement's execution, such Agreement, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify NYSERDA within five (5) business days of such conviction, determination or disposition of appeal. (See and compare Section 220-f of the Labor Law, Section 139-h of the State Finance Law, and 2 NYCRR 105.4).

5. SET-OFF RIGHTS. NYSERDA shall have all of its common law and statutory rights of set-off. These rights shall include, but not be limited to, NYSERDA's option to withhold for the purposes of set-off any moneys due to the Contractor under this Agreement up to any amounts due and owing to NYSERDA with regard to this Agreement, any other Agreement, including any Agreement for a term commencing prior to the term of this Agreement, plus any amounts due and owing to NYSERDA for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto.

6. PROPRIETARY INFORMATION. Notwithstanding any provisions to the contrary in the Agreement, Contractor and NYSERDA acknowledge and agree that all information, in any format, submitted to NYSERDA shall be subject to and treated in accordance with the NYS Freedom of Information Law ("FOIL," Public Officers Law, Article 6). Pursuant to FOIL, NYSERDA is required to make available to the public, upon request, records or portions thereof which it possesses, unless that information is statutorily exempt from disclosure. Therefore, unless the Agreement specifically requires otherwise, Contractor should submit information to NYSERDA in a non-confidential, non-proprietary format. FOIL does provide that NYSERDA may deny access to records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." [See Public Officers Law, § 87(2)(d)]. Accordingly, if the Agreement specifically requires submission of information in a format Contractor considers a proprietary and/or confidential trade secret, Contractor shall fully identify and plainly label the information "confidential" or "proprietary" at the time of disclosure. By so marking such information, Contractor represents that the information has actual or potential specific commercial or competitive value to the competitors of Contractor. Without limitation, information will not be considered confidential or proprietary if it is or has been (i) generally known or available from other sources without obligation concerning its confidentiality; (ii) made available by the owner

to others without obligation concerning its confidentiality; or (iii) already available to NYSERDA without obligation concerning its confidentiality. In the event of a FOIL request, it is NYSERDA's policy to consider records as marked above pursuant to the trade secret exemption procedure set forth in 21 New York Codes Rules & Regulations § 501.6 and any other applicable law or regulation. However, NYSERDA cannot guarantee the confidentiality of any information submitted. More information on FOIL, and the relevant statutory law and regulations, can be found at the website for the Committee on Open Government (<http://www.dos.state.ny.us/coog/foil2.html>) and NYSERDA's Regulations, Part 501 (<http://www.nyserda.ny.gov/About/New-York-State-Regulations.aspx>).

7. IDENTIFYING INFORMATION AND PRIVACY NOTIFICATION. (a) FEDERAL EMPLOYER IDENTIFICATION NUMBER and/or FEDERAL SOCIAL SECURITY NUMBER. As a condition to NYSERDA's obligation to pay any invoices submitted by Contractor pursuant to this Agreement, Contractor shall provide to NYSERDA its Federal employer identification number or Federal social security number, or both such numbers when the Contractor has both such numbers. Where the Contractor does not have such number or numbers, the Contractor must give the reason or reasons why the payee does not have such number or numbers.

(b) PRIVACY NOTIFICATION. The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by Contractor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.

8. CONFLICTING TERMS. In the event of a conflict between the terms of the Agreement (including any and all attachments thereto and amendments thereof) and the terms of this Exhibit A, the terms of this Exhibit A shall control.

9. GOVERNING LAW. This Agreement shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

10. NO ARBITRATION. Disputes involving this Agreement, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily required) without the NYSERDA's written consent, but must, instead, be heard in a court of competent jurisdiction of the State of New York.

11. SERVICE OF PROCESS. In addition to the methods of service allowed by the State Civil Practice Law and Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon NYSERDA's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify NYSERDA, in writing, of each and every change of address to which service of process can be

made. Service by NYSERDA to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

12. CRIMINAL ACTIVITY. If subsequent to the effectiveness of this Agreement, NYSERDA comes to know of any allegation previously unknown to it that the Contractor or any of its principals is under indictment for a felony, or has been, within five (5) years prior to submission of the Contractor's proposal to NYSERDA, convicted of a felony, under the laws of the United States or Territory of the United States, then NYSERDA may exercise its stop work right under this Agreement. If subsequent to the effectiveness of this Agreement, NYSERDA comes to know of the fact, previously unknown to it, that Contractor or any of its principals is under such indictment or has been so convicted, then NYSERDA may exercise its right to terminate this Agreement. If the Contractor knowingly withheld information about such an indictment or conviction, NYSERDA may declare the Agreement null and void and may seek legal remedies against the Contractor and its principals. The Contractor or its principals may also be subject to penalties for any violation of law which may apply in the particular circumstances. For a Contractor which is an association, partnership, corporation, or other organization, the provisions of this paragraph apply to any such indictment or conviction of the organization itself or any of its officers, partners, or directors or members of any similar governing body, as applicable.

13. PERMITS. It is the responsibility of the Contractor to acquire and maintain, at its own cost, any and all permits, licenses, easements, waivers and permissions of every nature necessary to perform the work.

14. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS. The Contractor certifies and warrants that all wood products to be used under this Agreement will be in accordance with, but not limited to, the specifications and provisions of State Finance Law Section 165 (Use of Tropical Hardwoods), which prohibits purchase and use of tropical hardwoods, unless specifically exempted by NYSERDA.

15. OMNIBUS PROCUREMENT ACT OF 1992. It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development  
Division for Small Business  
625 Broadway  
Albany, New York 12207  
Telephone: 518-292-5200  
Fax: 518-292-5884  
<http://www.esd.ny.gov>

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development  
Division of Minority and Women's Business Development  
625 Broadway  
Albany, New York 12207  
Telephone: 518-292-5200  
Fax: 518-292-5803  
<http://www.empire.state.ny.us>

The Omnibus Procurement Act of 1992 requires that by signing this Agreement, Contractors certify that whenever the total amount is greater than \$1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

16. RECIPROCITY AND SANCTIONS PROVISIONS. Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

17. COMPLIANCE WITH NEW YORK STATE INFORMATION SECURITY BREACH AND NOTIFICATION ACT. Contractor shall comply with the provisions of the New York State Information Security Breach and Notification Act (General Business Law Section 899-aa; State Technology Law Section 208).

18. PROCUREMENT LOBBYING. To the extent this Agreement is a "procurement contract" as defined by State Finance Law Sections 139-j and 139-k, by signing this Agreement

the Contractor certifies and affirms that all disclosures made in accordance with State Finance Law Sections 139-j and 139-k are complete, true and accurate. In the event such certification is found to be intentionally false or intentionally incomplete, NYSERDA may terminate the agreement by providing written notification to the Contractor in accordance with the terms of the agreement.

19. COMPLIANCE WITH TAX LAW SECTION 5-a. The following provisions apply to Contractors that have entered into agreements in an amount exceeding \$100,000 for the purchase of goods and services:

- a) Before such agreement can take effect, the Contractor must have on file with the New York State Department of Taxation and Finance a Contractor Certification form (ST-220-TD).
- b) Prior to entering into such an agreement, the Contractor is required to provide NYSERDA with a completed Contractor Certification to Covered Agency form (Form ST-220-CA).
- c) Prior to any renewal period (if applicable) under the agreement, the Contractor is required to provide NYSERDA with a completed Form ST-220-CA.

Certifications referenced in paragraphs (b) and (c) above will be maintained by NYSERDA and made a part hereof and incorporated herein by reference.

NYSERDA reserves the right to terminate this agreement in the event it is found that the certification filed by the Contractor in accordance with Tax Law Section 5-a was false when made.

20. IRANIAN ENERGY SECTOR DIVESTMENT. In accordance with Section 2879-c of the Public Authorities Law, by signing this contract, each person and each person signing on behalf of any other party certifies, and in the case of a joint bid or partnership each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each person is not on the list created pursuant to paragraph (b) of subdivision 3 of section 165-a of the State Finance Law (See [www.ogs.ny.gov/about/regs/ida.asp](http://www.ogs.ny.gov/about/regs/ida.asp)).

EXHIBIT B  
CERTIFICATION AND ASSIGNMENT OF RIGHTS FORM

NYSERDA Agreement No. \_\_\_\_\_

Name of Seller: \_\_\_\_\_

Name of Bid Facility: \_\_\_\_\_

Invoice Number \_\_\_\_\_

Seller hereby sells, assigns, conveys and delivers to NYSERDA all right, title and interest in the RPS Attributes, such RPS Attributes having been created in the month of \_\_\_\_\_, in the year \_\_\_\_\_, for which payment is requested by the accompanying invoice. Such right, title and interest shall include perpetual and exclusive rights to the RPS Attributes for which payment is requested, including but not limited to the exclusive rights to claim, consistent with New York State Environmental Disclosure rules: (i) that the energy associated with these RPS Attributes was generated by the Bid Facility; and (ii) that New York State and or the RPS Program is responsible for the environmental benefits resulting from the generation of that portion of the Bid Facility's energy that is associated with these RPS Attributes.

Seller further certifies and guarantees that all of the information provided on the attached invoice requesting payment from NYSERDA under the terms of NYSERDA Agreement No. \_\_\_\_\_ is true and accurate; that the Bid Facility named above was at all times relevant and is now an eligible facility under the rules of the NYS Renewable Portfolio Standard; that the RPS Attributes to which all right, title and interest is transferred to NYSERDA by this instrument are free and clear of all liens, judgments, encumbrances and restrictions, and have not have otherwise been, nor will be, sold, retired, claimed or represented as part of electricity output or sales, or used to satisfy obligations in any other jurisdiction.

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Signature of Seller's Authorized Officer

\_\_\_\_\_  
Name of Seller's Authorized Officer

EXHIBIT C  
LETTER OF CREDIT

FORM OF IRREVOCABLE STANDBY LETTER OF CREDIT

IRREVOCABLE STANDBY LETTER OF CREDIT NO. \_\_\_\_\_

DATE: \_\_\_\_\_ , 20\_\_

BENEFICIARY:

THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY  
17 COLUMBIA CIRCLE, ALBANY, NEW YORK 12203-6399

LADIES AND GENTLEMEN:

BY THE ORDER OF:

[SELLER]

[SELLER'S ADDRESS]

WE HEREBY ISSUE OUR IRREVOCABLE CREDIT NO: \_\_\_\_\_ IN YOUR FAVOR FOR THE ACCOUNT OF \_\_\_\_\_ (THE "SELLER") FOR AN AMOUNT OR AMOUNTS NOT TO EXCEED IN THE AGGREGATE [STATE IN WORDS] U.S. DOLLARS AVAILABLE BY YOUR DRAFTS AT SIGHT ON [INSERT NAME AND ADDRESS OF ISSUING BANK], NEW YORK, NEW YORK, USA, WHEN ACCOMPANIED BY THE FOLLOWING DOCUMENTS:

1. YOUR SIGHT DRAFT DRAWN ON US IN THE FORM OF ANNEX A HERETO (THE "SIGHT DRAFT"); AND
2. A DATED PAYMENT CERTIFICATE PURPORTEDLY SIGNED BY A DULY AUTHORIZED OFFICER OF NYSEDA IN THE FORM OF ANNEX B HERETO (THE "PAYMENT CERTIFICATE").

MULTIPLE DRAWINGS ARE PERMITTED IN AMOUNTS NOT TO EXCEED, IN COMBINATION, THE AGGREGATE AMOUNT.

DEMANDS PRESENTED BY FACSIMILE (TO FACSIMILE NUMBER \_\_\_\_\_) ARE ACCEPTABLE: PROVIDED THAT IF ANY SUCH DEMAND IS PRESENTED BY FACSIMILE, THE ORIGINAL SIGHT DRAFT, STATEMENT, AND LETTER OF CREDIT SHALL BE SIMULTANEOUSLY FORWARDED BY OVERNIGHT COURIER SERVICE TO OUR OFFICE LOCATED AT THE ADDRESS STATED ABOVE; PROVIDED FURTHER THAT THE FAILURE OF THE COURIER SERVICE TO TIMELY DELIVER SHALL NOT AFFECT THE EFFICACY OF THE DEMAND.

FUNDS UNDER THIS LETTER OF CREDIT ARE AVAILABLE TO YOU AGAINST YOUR PAYMENT CERTIFICATE AND SIGHT DRAFT PRESENTED IN FULL COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT ON OR BEFORE 5:00 P.M., NEW YORK TIME, ON THE EXPIRATION DATE HEREOF. THIS LETTER OF CREDIT WILL EXPIRE ON [INSERT DATE].

PAYMENT AGAINST CONFORMING DOCUMENTS PRESENTED UNDER THIS LETTER OF CREDIT SHALL BE MADE BY US AT OR BEFORE 2:00 P.M., NEW YORK TIME, ON THE NEXT (OR, IN THE CASE OF A PRESENTATION AFTER 10:30 A.M., NEW YORK TIME, THE SECOND NEXT) BANKING DAY AFTER PRESENTATION.

ALL PAYMENTS MADE BY US UNDER THIS LETTER OF CREDIT WILL BE MADE IN IMMEDIATELY AVAILABLE FUNDS AND WILL BE DISBURSED FROM OUR OWN FUNDS. IF REQUESTED BY YOU, PAYMENT UNDER THIS LETTER OF CREDIT MAY BE MADE BY WIRE TRANSFER OF FEDERAL RESERVE BANK OF NEW YORK FUNDS TO YOUR ACCOUNT IN A BANK ON THE FEDERAL RESERVE WIRE SYSTEM. BENEFICIARY'S BANK [INSERT NAME AND ACCOUNT NUMBER].

ONLY YOU MAY MAKE ANY PAYMENT CERTIFICATE AND SIGHT DRAFT UNDER THIS LETTER OF CREDIT.

ANY SIGHT DRAFT DRAWN HEREUNDER MUST BE MARKED "DRAWN UNDER [INSERT NAME AND ADDRESS OF ISSUING BANK], STANDBY LETTER OF CREDIT NUMBER \_\_\_\_\_ DATED \_\_\_\_\_."

ALL BANK CHARGES INCLUDING BUT NOT LIMITED TO, FEES OR COMMISSIONS, SHALL BE FOR APPLICANT'S ACCOUNT.

MISCELLANEOUS

THIS LETTER OF CREDIT SETS FORTH IN FULL THE TERMS OF OUR UNDERTAKING. SUCH UNDERTAKING SHALL NOT IN ANY WAY BE MODIFIED, AMENDED OR AMPLIFIED BY REFERENCE TO ANY DOCUMENT OR INSTRUMENT REFERRED TO HEREIN OR IN WHICH THIS LETTER OF CREDIT IS REFERRED OR TO WHICH IT RELATES (INCLUDING, WITHOUT LIMITATION, THE AGREEMENT) AND ANY SUCH REFERENCE SHALL NOT BE DEEMED TO INCORPORATE HEREIN BY REFERENCE ANY DOCUMENT OR INSTRUMENT.

WE HEREBY AGREE WITH YOU THAT EACH DULY COMPLETED PAYMENT CERTIFICATE AND SIGHT DRAFT DRAWN UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT WILL BE DULY HONORED UPON PRESENTATION TO US ON OR BEFORE THE EXPIRY DATE.. THE OBLIGATION OF [ISSUING BANK] UNDER THIS LETTER OF CREDIT IS THE INDIVIDUAL OBLIGATION OF [ISSUING BANK], AND IS IN NO WAY CONTINGENT UPON REIMBURSEMENT WITH RESPECT THERETO.

EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, THIS LETTER OF CREDIT IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS (1993 REVISION), INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION 500 (PROVIDED, HOWEVER, THAT DRAWINGS PERMITTED HEREUNDER SHALL NOT BE DEEMED TO BE DRAWINGS BY INSTALLMENTS WITHIN ARTICLE 41 OF THE UCP) AND AS TO MATTERS NOT GOVERNED BY THE UCP, SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK AND APPLICABLE U.S. FEDERAL LAW.

PLEASE ADDRESS ALL CORRESPONDENCE REGARDING THIS LETTER OF CREDIT TO THE ATTENTION OF OUR STANDBY LETTER OF CREDIT UNIT, GLOBAL TRADE SERVICE, MENTIONING OUR REFERENCE NUMBER AS IT APPEARS ABOVE.

[NAME AND ADDRESS OF ISSUING BANK]

\_\_\_\_\_  
AUTHORIZED SIGNATURE  
OF OFFICER OF ISSUING BANK

Annex A to Exhibit C - Irrevocable Standby Letter of Credit

SIGHT DRAFT

Letter of Credit No. \_\_\_\_\_

Date of Letter of Credit: \_\_\_\_\_

Date of Draft: \_\_\_\_\_

FOR VALUE RECEIVED

Pay on Demand to: THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT  
AUTHORITY, U.S. \_\_\_\_\_ Dollars (U.S. \$ \_\_\_\_\_). The amount of  
this draft does not exceed the amount available to be drawn by the Beneficiary under the Letter of Credit.

Charge to account of [Name of Seller].

Drawn under [Name of Bank] Letter of Credit No. \_\_\_\_\_.

To: [Issuing Bank]

[Address]

Attention: \_\_\_\_\_

\_\_\_\_\_  
As Beneficiary

By: \_\_\_\_\_  
[Name and Title]

Annex B to Exhibit C - Irrevocable Standby Letter of Credit

PAYMENT CERTIFICATE

To:  
[Issuing Bank]  
[Address]

Re: Irrevocable Standby Letter of Credit No: \_\_\_\_\_ [Insert]

The undersigned, a duly authorized officer of the undersigned Beneficiary, hereby certifies to [Issuing Bank], with reference to the Irrevocable Standby Letter of Credit No: [Insert] ("Letter of Credit"), that Seller, having provided the Letter of Credit to the New York State Energy Research and Development Authority ("NYSERDA") as Security for performance under NYSERDA Agreement No. \_\_\_\_\_ ("Agreement") in the aggregate amount of \$ \_\_\_\_\_, ("Letter of Credit Amount") either [check the appropriate space]:

\_\_\_\_\_ Seller failed to provide to NYSERDA, on or before May 2, 2017, Contract Security in the amount required under Section 15.01(b) of the Agreement, under which circumstance NYSERDA is authorized and entitled to draw an amount equal to one-hundred (100) percent of the Letter of Credit Amount.

\_\_\_\_\_ Seller has failed to perform in that Seller's Bid Facility has failed to attain Operational Certification and/or to commence Commercial Operation on or before the Commercial Operation Milestone Date of April 30, 2018; under which circumstance NYSERDA is authorized and entitled to draw an amount equal to one-hundred (100) percent of the Letter of Credit Amount;

\_\_\_\_\_ Seller has failed to perform in that Seller's Bid Facility has failed to attain Operational Certification and/or to commence Commercial Operation on or before the Commercial Operation Milestone Date of July 31, 2019; under which circumstance NYSERDA is authorized and entitled to draw an amount equal to one-hundred (100) percent of the Letter of Credit Amount;

\_\_\_\_\_ The Installed Bid Capacity is less than the Bid Capacity; under which circumstance, NYSERDA is authorized to draw a percentage of the Letter of Credit Amount, such percentage will be equal to the Bid Capacity minus the Installed Bid Capacity divided by the Bid Capacity.

\_\_\_\_\_ Seller has assigned its rights under the Agreement and the assignee has not delivered to the undersigned Beneficiary a replacement letter of credit satisfying the requirements of the Agreement; under which circumstance NYSERDA is authorized and entitled to draw an amount equal to one-hundred (100) percent of the Letter of Credit Amount;

\_\_\_\_\_ the Letter of Credit is currently set to expire within thirty (30) days and the Seller has not made arrangements acceptable to the undersigned Beneficiary to provide a substitute letter of credit prior to such expiration; under which circumstance NYSERDA is authorized and entitled to draw an amount equal to one-hundred (100) percent of the Letter of Credit Amount.

The terms used herein which are not specifically defined herein are defined in the Letter of Credit or the Agreement, referenced above.

IN WITNESS WHEREOF, the Beneficiary has executed and delivered this payment Certificate as of the \_\_\_\_\_ day of \_\_\_\_\_.

\_\_\_\_\_  
As Beneficiary

By: \_\_\_\_\_  
[Name and Title]

EXHIBIT D  
NYSERDA PROMPT PAYMENT POLICY STATEMENT

**504.1. Purpose and Applicability.** (a) The purpose of this Exhibit is to provide a description of Part 504 of NYSERDA's regulations, which consists of NYSERDA's policy for making payment promptly on amounts properly due and owing by NYSERDA under this Agreement. The section numbers used in this document correspond to the section numbers appearing in Part 504 of the regulations.<sup>1</sup>

(b) This Exhibit applies generally to payments due and owing by the NYSERDA to the Contractor pursuant to this Agreement. However, this Exhibit does not apply to Payments due and owing when NYSERDA is exercising a Set-Off against all or part of the Payment, or if a State or Federal law, rule or regulation specifically requires otherwise.

**504.2. Definitions.** Capitalized terms not otherwise defined in this Exhibit shall have the same meaning as set forth earlier in this Agreement. In addition to said terms, the following terms shall have the following meanings, unless the context shall indicate another or different meaning or intent:

(a) "Date of Payment" means the date on which NYSERDA requisitions a check from its statutory fiscal agent, the Department of Taxation and Finance, to make a Payment.

(b) "Designated Payment Office" means the Office of NYSERDA's Controller, located at 17 Columbia Circle, Albany, New York 12203.

(c) "Payment" means payment properly due and owing to Contractor pursuant to Article IV, Exhibit B of this Agreement.

(d) "Prompt Payment" means a Payment within the time periods applicable pursuant to Sections 504.3 through 504.5 of this Exhibit in order for NYSERDA not to be liable for interest pursuant to Section 504.6.

(e) "Payment Due Date" means the date by which the Date of Payment must occur, in accordance with the provisions of Sections 504.3 through 504.5 of this Exhibit, in order for NYSERDA not to be liable for interest pursuant to Section 504.6.

(f) "Proper Invoice" means a written request for Payment that is submitted by a Contractor setting forth the description, price or cost, and quantity of goods, property or services delivered or rendered, in such form, and supported by such other substantiating documentation, as NYSERDA may reasonably require, including but not limited to any requirements set forth in Exhibits A or B to this Agreement; and addressed to NYSERDA's Controller, marked "Attention: Accounts Payable," at the Designated Payment Office.

(g)(1) "Receipt of an Invoice" means:

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<sup>1</sup> This is only a summary; the full text of Part 504 can be accessed at:  
<http://www.nyserda.ny.gov/en/About/~media/Files/About/Contact/NYSERDARegulations.ashx>

(i) if the Payment is one for which an invoice is required, the later of:

(a) the date on which a Proper Invoice is actually received in the Designated Payment Office during normal business hours; or

(b) the date by which, during normal business hours, NYSERDA has actually received all the purchased goods, property or services covered by a Proper Invoice previously received in the Designated Payment Office.

(ii) if the Agreement provides that a Payment will be made on a specific date or at a predetermined interval, without having to submit a written invoice the 30th calendar day, excluding legal holidays, before the date so specified or predetermined.

(2) For purposes of this subdivision, if the Agreement requires a multifaceted, completed or working system, or delivery of no less than a specified quantity of goods, property or services and only a portion of such systems or less than the required goods, property or services are working, completed or delivered, even though the Contractor has invoiced NYSERDA for the portion working, completed or delivered, NYSERDA will not be in Receipt of an Invoice until the specified minimum amount of the systems, goods, property or services are working, completed or delivered.

(h) "Set-off" means the reduction by NYSERDA of a payment due a Contractor by an amount equal to the amount of an unpaid legally enforceable debt owed by the Contractor to NYSERDA.

**504.3. Prompt Payment Schedule.** Except as otherwise provided by law or regulation or in Sections 504.4 and 504.5 of this Exhibit, the Date of Payment by NYSERDA of an amount properly due and owing under this Agreement shall be no later than thirty (30) calendar days, excluding legal holidays, after Receipt of a Proper Invoice.

**504.4. Payment Procedures.**

(a) Unless otherwise specified in this Agreement, a Proper Invoice submitted by the Contractor to the Designated Payment Office shall be required to initiate payment for goods, property or services. As soon as any invoice is received in the Designated Payment Office during normal business hours, such invoice shall be date-stamped. The invoice shall then promptly be reviewed by NYSERDA.

(b) NYSERDA shall notify the Contractor within fifteen (15) calendar days after Receipt of an Invoice of:

- (1) any defects in the delivered goods, property or services;
- (2) any defects in the invoice; or
- (3) suspected improprieties of any kind.

(c) The existence of any defects or suspected improprieties shall prevent the commencement of the time period specified in Section 504.3 until any such defects or improprieties are corrected or otherwise resolved.

(d) If NYSERDA fails to notify a Contractor of a defect or impropriety within the fifteen (15) calendar day period specified in subdivision (b) of this section, the sole effect shall be that the number of days allowed for Payment shall be reduced by the number of days between the 15th day and the day that notification was transmitted to the Contractor. If NYSERDA fails to provide reasonable grounds for its contention that a defect or impropriety exists, the sole effect shall be that the Payment Due Date shall be calculated using the original date of Receipt of an Invoice.

(e) In the absence of any defect or suspected impropriety, or upon satisfactory correction or resolution of a defect or suspected impropriety, NYSERDA shall make Payment, consistent with any such correction or resolution and the provisions of this Exhibit.

**504.5. Exceptions and Extension of Payment Due Date.** NYSERDA has determined that, notwithstanding the provisions of Sections 504.3 and 504.4 of this Exhibit, any of the following facts or circumstances, which may occur concurrently or consecutively, reasonably justify extension of the Payment Due Date:

(a) If this Agreement provides Payment will be made on a specific date or at a predetermined interval, without having to submit a written invoice, if any documentation, supporting data, performance verification, or notice specifically required by this Agreement or other State or Federal mandate has not been submitted to NYSERDA on a timely basis, then the Payment Due Date shall be extended by the number of calendar days from the date by which all such matter was to be submitted to NYSERDA and the date when NYSERDA has actually received such matter.

(b) If an inspection or testing period, performance verification, audit or other review or documentation independent of the Contractor is specifically required by this Agreement or by other State or Federal mandate, whether to be performed by or on behalf of NYSERDA or another entity, or is specifically permitted by this Agreement or by other State or Federal provision and NYSERDA or other entity with the right to do so elects to have such activity or documentation undertaken, then the Payment Due Date shall be extended by the number of calendar days from the date of Receipt of an Invoice to the date when any such activity or documentation has been completed, NYSERDA has actually received the results of such activity or documentation conducted by another entity, and any deficiencies identified or issues raised as a result of such activity or documentation have been corrected or otherwise resolved.

(c) If an invoice must be examined by a State or Federal agency, or by another party contributing to the funding of the Contract, prior to Payment, then the Payment Due Date shall be extended by the number of calendar days from the date of Receipt of an Invoice to the date when the State or Federal agency, or other contributing party to the Contract, has completed the inspection, advised NYSERDA of the results of the inspection, and any deficiencies identified or issues raised as a result of such inspection have been corrected or otherwise resolved.

(d) If appropriated funds from which Payment is to be made have not yet been appropriated or, if appropriated, not yet been made available to NYSERDA, then the Payment Due Date shall be extended by the number of calendar days from the date of Receipt of an Invoice to the date when such funds are made available to NYSERDA.

**504.6. Interest Eligibility and Computation.** If NYSERDA fails to make Prompt Payment, NYSERDA shall pay interest to the Contractor on the Payment when such interest computed as provided herein is equal to or more than ten dollars (\$10.00). Interest shall be computed and accrue at the daily rate in effect on the Date of Payment, as set by the New York State Tax Commission for corporate taxes pursuant to Section 1096(e)(1) of the Tax Law. Interest on such a Payment shall be computed for the period beginning on the day after the Payment Due Date and ending on the Date of Payment.

**504.7. Sources of Funds to Pay Interest.** Any interest payable by NYSERDA pursuant to Exhibit shall be paid only from the same accounts, funds, or appropriations that are lawfully available to make the related Payment.

**504.8. Incorporation of Prompt Payment Policy Statement into Contracts.** The provisions of this Exhibit shall apply to all Payments as they become due and owing pursuant to the terms and conditions of this Agreement, notwithstanding that NYSERDA may subsequently amend its Prompt Payment Policy by further rulemaking.

**504.9. Notice of Objection.** Contractor may object to any action taken by NYSERDA pursuant to this Exhibit that prevents the commencement of the time in which interest will be paid by submitting a written notice of objection to NYSERDA. Such notice shall be signed and dated and concisely and clearly set forth the basis for the objection and be addressed to the Vice President, New York State Energy Research and Development Authority, at the notice address set forth in Exhibit B to this Agreement. The Vice President of NYSERDA, or his or her designee, shall review the objection for purposes of affirming or modifying NYSERDA's action. Within fifteen (15) working days of the receipt of the objection, the Vice President, or his or her designee, shall notify the Contractor either that NYSERDA's action is affirmed or that it is modified or that, due to the complexity of the issue, additional time is needed to conduct the review; provided, however, in no event shall the extended review period exceed thirty (30) working days.

**504.10. Judicial Review.** Any determination made by NYSERDA pursuant to this Exhibit that prevents the commencement of the time in which interest will be paid is subject to judicial review in a proceeding pursuant to Article 78 of the Civil Practice Law and Rules. Such proceedings shall only be commenced upon completion of the review procedure specified in Section 504.9 of this Exhibit or any other review procedure that may be specified in this Agreement or by other law, rule, or regulation.

**504.11. Court Action or Other Legal Processes.**

(a) Notwithstanding any other law to the contrary, the liability of NYSERDA to make an interest payment to a Contractor pursuant to this Exhibit shall not extend beyond the date of a

notice of intention to file a claim, the date of a notice of a claim, or the date commencing a legal action for the payment of such interest, whichever occurs first.

(b) With respect to the court action or other legal processes referred to in subdivision (a) of this section, any interest obligation incurred by NYSERDA after the date specified therein pursuant to any provision of law other than Public Authorities Law Section 2880 shall be determined as prescribed by such separate provision of law, shall be paid as directed by the court, and shall be paid from any source of funds available for that purpose.

EXHIBIT E

REQUIREMENTS FOR BIOMASS-FUELED BID FACILITIES

**I. BIOMASS PROJECTS – ALL FUEL TYPES**

This section prescribes basic requirements that apply to all biomass power generation facilities. Additional requirements apply to facilities that use a combination of eligible and ineligible fuels, and fuels derived from mixed waste streams such as Construction and Demolition (C&D) debris, Landfill Gas or Renewable Pipeline Gas. Provisions related to procurement or delivery of biomass fuels do not apply to projects where the fuel is produced at the same facility that generates the power such as a landfill gas project that generates power on site.

**BASIC REQUIREMENTS**

Basic requirements for all Sellers include:

- Seller is required to have fuel procurement contracts to ensure that the biomass fuels specification is consistent with the definition of eligible fuels.
- For Sellers using harvested or silvicultural waste wood, a Forest Management Plan is required. Harvested/silvicultural wood suppliers are required to be in compliance with the Forest Management Plan and to prepare harvest plans for each parcel.
- For each fuel delivery, the Seller must implement a plan to sample/inspect fuel for compliance with eligibility specifications that includes procedures for fuel inspection and delivery acceptance or rejection. For gaseous or liquid fuels derived from eligible solid biomass resources the Seller must certify the eligible content of the feedstocks used to produce the fuel for each fuel producer.
- Prior to Operational Certification, the Seller must obtain all environmental approvals and permit modifications required by NYSDEC.
- For operational certification the contractor must submit a Fuel Management, Measurement, and Calibration Plan described below.

**SUBMISSION OF A FUEL MANAGEMENT, MEASUREMENT, AND CALIBRATION PLAN**

Prior to Operational Certification, the Seller must submit a Fuel Management, Measurement, and Calibration Plan (The Plan). The Plan is intended to demonstrate to NYSERDA that the facility has in place the procedures to track fuel deliveries and inspect the quality of fuel deliveries. The Plan must cover all aspects of fuel procurement and onsite operations important to ensuring the terms of the contract are met. In general, fuel procurement, inspection of deliveries, onsite fuel management, fuel flow measurement and sampling for testing should be addressed.

Facilities that fire exclusively eligible fuels will need to prepare a relatively brief fuel management, measurement, and calibration plan, aimed primarily at fuel delivery inspection and quality assurance. A sample plan outline is included in the Biomass Power Guide for the RPS Program which can be downloaded from the NYSERDA RPS Program web site. The Plan must include the following information:

### **FUEL PROCUREMENT**

Identify fuel procurement QA/QC provisions that ensure fuel suppliers have an effective QA/QC program in place to provide biomass fuels from secondary sources meeting the criteria for RPS eligibility. Describe the process for certifying suppliers to meet RPS requirements. If harvested fuels are used then the facility's Forest Management Plan can be referred to in this section.

### **FUEL MANAGEMENT AND INSPECTION**

How fuel is to be managed and inspected must be documented. The plan should address delivery, inspection, and storage and management of the fuel up to point of firing. Facilities may receive deliveries of biomass fuels through a variety of modes: for example truckloads of wood chips, a tanker of renewable diesel, or landfill gas flowing through piping. The Plan's details should include how the fuel is to be sampled and inspected for ineligible fuels or contaminants prior to delivery acceptance and/or use. For example, a solid fuel facility must describe how trailers of wood chips will be inspected prior to or during unloading and how material will be handled if inspection reveals ineligible fuel contamination that has entered the eligible fuel handling system. Additional requirements are set forth in Sections II, III and IV of this exhibit for facilities that fire a combination of eligible and ineligible fuels or Clean MRF Fuels.

### **OPERATING PROCEDURES**

Facilities must also provide operating procedures that facility staff will use to inspect, monitor and measure fuels, and document the execution of these procedures. Such procedures should be prepared in a way that facilitates their distribution to plant personnel, including how and when to take fuel samples, and inspect fuel unloading for ineligible contaminants in the eligible fuel stream. Such procedures should be posted at all necessary locations, including sampling points and fuel delivery stations.

### **FUEL FLOW MEASUREMENT AND SAMPLING**

A key aspect of the plan is a description of how, where, and with what frequency fuel flow measurement and fuel sampling of eligible fuels will be performed. Special requirements are placed on facilities that fire Clean MRF Fuels or a mix of eligible and ineligible fuels. These requirements are addressed in subsequent Sections of this exhibit. For all facilities the method of measuring fuel flow will depend on the methods of delivery. Generally for solid and liquid biofuels truck scales will be the standard method for measuring fuel intake. The Plan should describe how deliveries are weighed in and out and how the scales are maintained and calibrated for accuracy. Additional requirements are set forth in subsequent Sections of this exhibit for facilities that fire a combination of eligible and ineligible fuels or Clean MRF Fuels.

### **FUEL TESTING AND ANALYSIS**

For eligible fuels derived from secondary sources (all fuels that do not come directly from wood harvested on forested land as chips or roundwood in accordance with an approved Forest Management Plan and Harvest Plan), RCRA metals<sup>2</sup>, sulfur, and copper analyses

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<sup>2</sup> "RCRA Metals" refers to EPA analytical method EPA SW-846, for the measurement of lead, arsenic, chromium, selenium, mercury, silver, cadmium, and barium.

should be performed to establish a baseline fuel composition. The plan must describe how these analyses are conducted for each combination of fuel supplier (fuel broker) and fuel source, at least once every six months. Additional requirements are set forth in Sections II, III and IV of this exhibit for facilities that fire a combination of eligible and ineligible fuels or Clean MRF Fuels.

## **FOREST MANAGEMENT AND HARVEST PLANS**

For any facility planning to use biomass harvested from forest land (chipped or roundwood) the facility must prepare a Forest Management Plan which sets forth the requirements and environmental safeguards for every harvest. The form and content of the plan is described in the Biomass Power Guide. For each harvest of forest biomass a harvest plan must be prepared in accordance with the Forest Management Plan and kept on file for the duration of the RPS contract at the Power Generating Facility.

## **REPORTING REQUIREMENTS**

### **Initial Reports**

Facilities must provide the Fuel Management Measurement and Calibration Plan including the results of the RCRA metals, sulfur, and copper analyses for secondary sources of biomass.

For Facilities procuring biomass from wood harvested on forested land as chips or roundwood, a Forest Management Plan must be submitted and approved for operational certification.

### **Monthly Reports**

Facilities must prepare a monthly fuel delivery and inspection log that will be available for review by NYSERDA on request. For each fuel delivery the record must include the supplier name and address, the fuel source, the fuel weight, description of the composition and physical characteristics, and a statement of inspection (pass/fail) to determine the integrity of the fuel. Reports related to procurement or delivery of biomass fuels do not apply to projects where the fuel is produced at the same facility that generates the power such as a landfill gas project that generates power at the same site. However, these on-site fuel and power production facilities must track and report the amounts for fuel produced for power production.

### **Semiannual and Annual Reports**

Facilities must provide the results of the RCRA metals, sulfur, and copper analyses for secondary sources of biomass for each supply source and fuel type.

## **II. BIOMASS PROJECTS USING ELIGIBLE AND INELIGIBLE FUELS**

Projects that use a combination of eligible and ineligible fuels must track the use of eligible fuels and ineligible fuels and the energy produced by each fuel category. This category of projects also includes Renewable Pipeline Gas which is transported by a common carrier and therefore comingled with ineligible fuels. This Section contains the requirements and methods for the measurement and accounting of Actual Eligible Production and RPS-related Excess SO<sub>2</sub> Reductions associated therewith. Actual Eligible Production reporting requirements vary between projects using solid biomass fuels and those using liquid biofuels or bio-gas fuels such as Renewable Pipeline Gas (RPG), Landfill Gas (LFG), digester gas, and fuel gas from biomass gasification.

### **A. GENERATION FROM A MIX OF ELIGIBLE BIOMASS AND INELIGIBLE FUELS**

Additional record keeping and reporting is required for plants using a mix of eligible and ineligible fuels. The amount of eligible generation from the plant (or generation unit) is proportional to the amount of input energy provided by the eligible fuel. The data collected shall be used to determine the daily heat input provided by the eligible solid biomass and the total daily heat input of all fuels to determine the Actual Eligible Production of the net electricity generated and sold in a monthly reporting period as well as determine the RPS-related excess sulfur reductions attributed to Actual Eligible Production (Sections C, D and E).

#### **Solid Biomass Fuels**

- The Seller is required to take samples from eligible and ineligible fuel streams for purposes of both fuel quality control and energy measurement. The Seller is required to maintain sample integrity and to have written fuel sampling procedures for handling, storage and shipping to the analysis lab.
- Continuous mass flow measurements are required for all fuels as fed to the boiler. A Fuel Management, Measurement, and Calibration Plan pursuant to guidelines herein must be submitted to and approved by NYSERDA before Operational Certification will be granted. Such plan must include procedures to ensure compliance with the requirements of this Contract when the equipment for fuel flow measurement is out of service.
- Approved test and measurement protocols for composition, moisture content and heat content are listed in the Test Methods Section below. If an alternative method is to be used it must to be submitted to NYSERDA in advance for approval by NYSERDA.
- **If Clean MRF is one of the Fuels, requirements of Section III also apply**

#### **Non-Pipeline Quality Bio-Gas Fuels (Such As Landfill Gas, Anaerobic Digester Gas) In Combination with Ineligible Fuels (Such As Natural Gas)**

- Sufficient metering must be in place at the landfill collection/processing facility to allow accurate accounting of gas produced, collected, and used in energy conversion on a daily basis. If the landfill gas generator and the electric generator are not owned and operated by the same organization and collocated, contracts must be in place to allow this

## II. Projects Using Eligible and Ineligible Fuels

information to be shared in compliance with the other requirements listed in this section.

- The volume of metered gas collected and used from either the landfill gas collection system or the anaerobic digester system should be reported in units of standard cubic feet (scf).
- The total (gross) amount of electricity generated using the eligible/ineligible fuel gas mixture must be reported on a daily basis.
- Approved test and measurement protocols for composition, moisture content and heat content are listed in Test Section below. If an alternative method is to be used it must be submitted to NYSERDA in advance for approval by NYSERDA.

**Pipeline Quality Bio-Gas Fuels (RPG)**

- Common carrier RPG resources shall be considered eligible only if sourced and used in the same state to generate power delivered to New York.
- Contracts for RPG transported over common carrier must be new contracts with respect to the date established in the RFP for project eligibility. The Seller must notify the gas producer as part of the new RPG contract, or modification, that the gas contract is being purchased for conversion to RPS eligible power and is subject to the accounting rules of the RPS program, that could include some of the provisions listed above for the use of non-pipeline quality gas.
- The RPG producer/supplier must certify that the gas delivered under contract is produced from new resources (i.e., new or expanded RPG production systems).
- The Seller must keep and provide sufficient records on physical delivery from common carrier, gas consumption, and gas quality to pro rate the Seller's monthly electrical generation based on the ratio of the total RPG contract gas energy and the total gas energy used. A report detailing the use of eligible and ineligible fuels shall be required.
- The Seller shall provide reporting of the total net electricity (net electricity in this context refers to the electric generation sold to the grid) generated as a direct result of the above measured eligible bio-gas fuel delivered to the conversion system. Total electricity shall be measured in MWh or kWh.

**SUBMISSION OF A FUEL MANAGEMENT, MEASUREMENT, AND CALIBRATION PLAN**

For operational certification the Seller must submit to NYSERDA a Fuel Management, Measurement and Calibration Plan as described in Section I. For facilities firing a mix of eligible and ineligible fuels additional requirements include:

**1. FUEL PROCUREMENT**

Describe fuel sources and estimate delivered proportions for each fuel type (e.g. harvested wood, Clean MRF Fuel). Identify fuel procurement QA/QC provisions that ensure fuel

## II. Projects Using Eligible and Ineligible Fuels

suppliers have an effective QA/QC program in place to provide biomass fuels from secondary sources meeting the criteria for RPS eligibility. Describe the process for certifying suppliers to meet RPS requirements. If harvested fuels are used then the facility's Forest Management Plan can be referred to in this section.

**2. FUEL MANAGEMENT AND INSPECTION**

Facilities must maintain eligible biomass fuel deliveries as a separate fuel stream up to the point of firing. Specifically mixing on the storage pile of other long term storage device is not acceptable. The plan should address delivery, inspection, and storage and management of the fuel up to point of firing. Any deviation from these principals will require NYSERDA review and consent.

**OPERATING PROCEDURES**

No additional requirements

**FUEL FLOW MEASUREMENT AND SAMPLING**

Multi-fuel power generation systems are subject to power production measurement and accounting rules that are designed to ensure that only the renewable portion of power generation is purchased under the RPS program procurements. This requires accurate accounting of the eligible renewable portion of the power production at the plant based on the following:

- a. An accurate and separate measurement and accounting of the RPS program eligible and ineligible fuels heat input to the conversion device measured as fired; and
- b. An apportionment of total electricity generation based on the fraction of the total conversion device heat input provided by the RPS program eligible fuel source.

The Seller will maintain and calibrate all equipment used for mass (solid fuels) and volumetric (liquid or gaseous) flow measurement and associated control devices in accordance with the procedures and calibration schedule set herein. A calibration schedule for each of the key equipment components must be provided. These schedules should be based on vendor recommendations or industry best practices. In any case, the following minimum standards apply:

- a. Gravimetric scales for ineligible fuels shall be calibrated no less than twice per year;
- b. Belt scales for eligible fuels shall be calibrated no less than once per month.
- c. Gas analysis and metering equipment are to be calibrated no less than once a year. If any meter required is not under the contractor's direct control, the contractor must provide other evidence of demonstrating that such meters are in proper working order.

The seller will maintain a calibration log that includes:

- a. A description of the calibration protocol
- b. Certifications for weighing and measurement systems used in calibration
- c. Record of measured variance and adjustments made to the equipment as a result of calibration
- d. Signature and date for the calibration technician
- e. If the calibration protocol deviates from the manufacturer's recommendations, such deviations should be noted and explained separately

## II. Projects Using Eligible and Ineligible Fuels

- f. As a separate attachment, the Seller should include copies of the manufacturer cut sheets, if available, specifying the system's accuracy, general operating characteristics and a written description or copy of the manufacturer's calibration requirements.

All scales and meters shall be calibrated by a third Party annually, and the results of such calibration must be provided to NYSERDA with the first invoice for each contract year.

**Measurement and Sampling Requirements for Sellers Using Solid Biomass Fuels**

The plan must describe the sampling equipment and procedures for maintaining sample integrity until delivery to the lab. The Seller is required to take grab samples from the as-fired eligible biomass fuel stream once every three-hour period. The Seller shall create a daily "super sample" from these grab samples. This "super sample" shall be sealed or stored in an environment that prevents decomposition of biomass and prevents moisture evaporation from the biomass. This "super sample" must be tagged with the date on which it was collected and logged in a Seller supplied sampling log. The Seller shall send the daily "super sample" to a lab within 24 hours of collection for a proximate analysis. Laboratory proximate analysis of moisture content in the biomass fuel must include an accounting for evaporative losses by adding condensed moisture in the sealed container to the moisture measured in the biomass sample. The proximate analysis result of the "super sample" shall be used to calculate daily as-fired heat input values. The Seller shall maintain documentation of sample timeliness, analysis and actions taken if analysis is delayed. The lab shall analyze the "super samples" within five business days of receipt. If a sample is delayed being shipped to the laboratory, the Seller shall notate any samples analyzed greater than six days from collection on the monthly invoice.

**Measurement and Sampling Requirements for Sellers Using Non-Pipeline Quality Bio-Gas Fuels (Such As Landfill Gas, Anaerobic Digester Gas)**

Continuous metering of eligible and ineligible fuel flows is required. The average methane content (% volume) of the bio-gas metered during the reporting period must be measured continuously using analyzers to generate a monthly weighted average or sampled and analyzed using an approved sampling protocol. This value shall be used for calculating heating input of the eligible fuel gas stream in the reporting periods after the sample's collection and prior to the next sample by incorporating data found in the baseline gas composition data. A statement of the composition of any natural-gas fired at the site from the supplier, including heating value must be kept on record. Monthly supplier bills may be used to validate the composition of the delivered natural gas in lieu of gas testing if such bills contain information on the heating value of the delivered gas.

If gas is being extracted from multiple landfill cells or multiple digester systems, individual metering and testing may be required if the composition of the resulting gas streams is materially different. The end use of the bio-gas or bio-gas mixture (electricity, thermal, flared, losses, export to end-user via common carrier, etc.) should be reported as a percentage by volume.

An ultimate bio-gas fuel composition analysis (annual baseline) is required. This test must be performed annually and must include trace hydrocarbons and other combustible gases in the fuel. The heating value for the fuel should be reported on a basis consistent with other

## II. Projects Using Eligible and Ineligible Fuels

reporting heating values required. The estimated heating value of the bio-gas (Btu/scf) used for electricity production and the basis for the estimate (higher or lower heating value) should be documented monthly through laboratory testing or may be calculated using an annual baseline test and measurement of methane content.

If bio-gas is to be fired with solid or liquid ineligible fuels, then the measurement of the non-gaseous fuels shall be subject to rules governing the use of each fuel.

**Measurement and Sampling Requirements for Sellers Using Pipeline Quality Bio-Gas Fuels (RPG)**

Metering at the point of conversion to RPG and at the end use must be sufficient to verify contract volumes associated with RPG contracts.

Critical metering points at the point of RPG injection to the common carrier and the point of withdrawal shall be subject to a calibration protocol. Operational Certification shall be conditioned on a plan for such calibration being submitted to and approved by NYSERDA.

Sufficient metering must be in place at the landfill collection/processing facility to allow accurate accounting of gas produced, collected, and the resulting volumes and energy content of the gas converted to RPG on a daily basis. Additional measurement or monitoring systems required to allocate the RPG produced to RPG delivery contracts may be required.

**FUEL TESTING AND ANALYSIS**

The Plan will provide procedures and schedules for testing the samples in accordance with the accounting requirements for eligible energy production. The Plan will identify the third Party labs that will conduct the testing of the chemical composition of the fuel. The labs used must not be affiliated with the Seller and experienced with the analytical testing.

**TESTING AND ANALYSIS METHODS*****Test Methods for Cofiring Eligible and Ineligible Fuels*****Eligible Solid Fuels**

The test methods in Table 1 are required to determine the values used to calculate the RPS eligible generation from cofired solid biomass fuels. The use of alternatives may be approved, but approval must be sought in advance of using alternative methods in any report.

**Table 1 Test Methods for Eligible Solid Fuels**

<b>Fuel Type</b>	<b>Measurement</b>	<b>Testing Method</b>	<b>Testing Frequency</b>
Directly Harvested ( <i>associated with an FMP</i> )	Proximate Analysis	ASTM Standard Method of Proximate Analysis (D5142)	Grab or in-line samples taken every 3-hour period. Such grab samples are to be measured in a single “Super Sample” at the end of each 24-hour operating period.
	Sulfur Analysis	ASTM Standard Test Method of Ultimate Analysis (D4239)	Once for each combination of supplier and source on a semiannual basis
Not Directly Harvested ( <i>not associated with an FMP</i> )	Proximate Analysis	ASTM Standard Method of Proximate Analysis (D5142)	Grab or in-line samples taken every 3-hour period. Such grab samples are to be measured in a single “Super Sample” at the end of each 24-hour operating period.
	RCRA Metals Analysis	EPA SW-846, for lead, arsenic, chromium, selenium, mercury, silver, cadmium, and barium	Once for each combination of supplier and source on a semiannual basis

**Ineligible Solid Fuels**

The test methods in Table 2 are required to determine the values used to calculate the amount of ineligible generation from ineligible fuels. The use of alternatives may be approved, but approval must be sought in advance of using alternative methods in any report.

**Table 2 Test Methods for Ineligible Solid Fuels**

<b>Measurement</b>	<b>Test or Measurement Method</b>	<b>Frequency</b>
Fuel Composition	ASTM Standard Test Method of Ultimate Analysis (D5373)	Once for each combination of supplier and source on a semiannual basis
Sulfur Analysis	ASTM Standard Test Method of Ultimate Analysis (D4239)	Once for each combination of supplier and source on a semiannual basis
Proximate Analysis	ASTM Standard Method of Proximate Analysis (D5142)	If needed, from one “Super Sample” assembled each day from grab samples taken every 3-hour period

## II. Projects Using Eligible and Ineligible Fuels

***Test Methods for Gaseous Fuel Cofiring*****Eligible Gaseous Fuels**

The following test methods in Table 3 are required to determine the heating values for bio-gas fuels. The use of alternatives may be approved, but approval must be sought in advance of using alternative methods in any report.

**Table 3 Test Methods for Eligible Gaseous Fuels**

Measurement	Test or Measurement Method	Frequency
Fuel Composition	ASTM D2650 - 04 Standard Test Method for Chemical Composition of Gases By Mass Spectrometry	Once annually for each source (individual testing may be required by cell or digester)
Methane Content – Continuous	Continuous Methane Analyzer	Continuous
Methane Content – Sample Average	If a Continuous Methane Analyzer is not used then periodic analysis of landfill gas composition using statistically valid samples using calibrated portable gas meters and delivering a confidence level of 95% may be used.	Monthly

**Ineligible Gaseous Fuels**

The following test methods in Table 4 are required to determine the values for ineligible gaseous fuels in the above calculations. The use of alternatives may be approved, but approval must be sought in advance of using alternative methods in any report.

**Table 4 Test Methods for Ineligible Gaseous Fuels**

Measurement	Test or Measurement Method	Frequency
Fuel Composition	Heating value data from pipeline or utility supplier (may be derived from supplier invoice)	Monthly

**CALCULATING ELIGIBLE RENEWABLE GENERATION**

The following equations shall be used to calculate the amount of eligible renewable generation produced at a facility cofiring eligible and ineligible fuels. Equations 1 through 3 are the basic equations for calculating the Actual Eligible Production (MWh/month) measured during the monthly reporting period. Use Equations 6 and 7 to calculate the daily measured Heat Input from eligible and ineligible fuels. Total Heat input on a daily basis is the sum of all fuel Heat Inputs (Equation 8).

**Equation 1: Monthly Total Eligible Production**

$$APM_e = \sum APD_e$$

Where:

$APM_e$  = Actual Eligible Production (MWh) during the monthly reporting period.

## II. Projects Using Eligible and Ineligible Fuels

$APD_e$  = Actual Eligible Production (MWh) each day during the monthly reporting period.

**Equation 2: Daily Eligible Production**

$$APD_e = \%Cofiring \times APD_T$$

Where:

$APD_e$  = Actual Daily Eligible Production (MWh)

$\%Cofiring$  = Daily Eligible Biomass Cofiring Percent (%)

$APD_T$  = Net Actual Production for the 24 Hour Period (MWh)

Net Actual Production (MWh) is the production measured at the Injection Point during each 24-hour period. Daily Eligible Biomass (%) is calculated using Equation 3.

**Equation 3: Cofiring Percentage based on a Heat Input Basis**

$$\%Cofiring = \frac{HI_{EF}}{HI_T}$$

Where:

$\%Cofiring$  = Daily Eligible Biomass Cofiring Percentage (%)

$HI_{EF}$  = Daily Total Heat Input from Eligible Fuels (MMBtu) (A single HHV measured on an as fired basis from the proximate analysis shall be applied to the entire mass flow for the day)

$HI_T$  = Daily Total Heat Input from Eligible and Ineligible Fuels (MMBtu) shown in Equation 3

The key components required to solve Equation 3 are explained and provided as follows:

**Solid Fuels: Determining heat input for eligible/ineligible fuels**

The as-fired Heat Input from eligible fuels in the numerator in Equation 3 is calculated using Equation 4.

**Equation 4: Daily Heat Input for Eligible Fuels**

$$HI_{EF} = HHV_{EF} \times \Sigma_{24}M_{EF}$$

Where:

$HHV_{EF}$  = Higher Heating Value of eligible fuel, as fired basis (MMBtu/lb)

$M_{EF}$  = Hourly Aggregate Mass flow of eligible fuels, as fired (lb/hr)

Sellers may wish to employ in-line sampling technologies that are able to measure moisture content of the fuel in real-time as it feeds into the system.

The Heat Input from Ineligible fuels ( $HI_{IF}$ ) shall be determined by the same method used for Eligible fuels ( $HI_{EF}$ ). If only one ineligible fuel of uniform composition (including moisture content) is used then the calculation is simplified to a single equation (5A) with no requirement for frequent proximate analysis.

## II. Projects Using Eligible and Ineligible Fuels

If multiple ineligible fuels are fired simultaneously in any day then the Seller may **either** apply the same sampling and analysis routine prescribed for eligible biomass fuels to the blended ineligible fuels **or** measure mass flows of each type of ineligible fuel prior to blending and use the semiannual ultimate analysis as the basis for calculating heat inputs daily for each ineligible fuel (Equation 5B).

**Daily Heat Input for Ineligible Fuels**

**Equation 5A:**  $HI_{IF} = HHV_{IF} \times \Sigma_{24}M_{IF}$  OR

**Equation 5B:**  $HI_{IF} = \Sigma_{\text{ineligible fuel types}} HHV_{IF} \times \Sigma_{24}M_{IF}$

Where:

$HHV_{IF}$  = Higher Heating Value of ineligible fuel, as fired basis (MMBtu/lb)

$M_{IF}$  = Hourly Aggregate Mass flow of ineligible fuels, as fired (lb/hr)

**Gaseous Fuels: Determining heat input for eligible/ineligible fuels**

A single LHV or HHV shall be applied to the entire volumetric flow for the day based on fuel analysis data. The necessary fuel analysis data shall include a baseline bio-gas composition including gas heating value and a measured methane content.

**Equation 6: Daily Heat Input for Eligible Fuels**

$HI_{EF} = HV_{EF} \times \Sigma_{24}V_{EF}$

Where:

$HV_{EF}$  = Lower or Higher Heating Value of eligible fuel, (Btu/scf) (A single LHV or HHV shall be applied to the entire volumetric flow for the day based on fuel analysis data)

$V_{EF}$  = Daily volumetric flow of eligible fuel, as-fired (scf/day)

The Heat Input from Ineligible fuels ( $HI_{IF}$ ) shall be determined by the same method used for Eligible fuels ( $HI_{EF}$ ). If only one ineligible fuel of uniform composition is used then the calculation is simplified to a single equation (7A).

If multiple ineligible fuels are fired simultaneously in any day then the contractor must measure the flows of each type of ineligible fuel prior to blending and use. In this case, Equation (7B) is used to calculate the total heat input of ineligible fuels.

**Daily Heat Input for Ineligible Fuels**

**Equation 7A:**  $HI_{IF} = HV_{IF} \times \Sigma_{24}V_{IF}$  OR

**Equation 7B:**  $HI_{IF} = \Sigma_{\text{ineligible fuel types}} HV_{IF} \times \Sigma_{24}V_{IF}$

Where:

$HV_{IF}$  = Heating Value (Lower or Higher) of ineligible fuel, as fired (Btu/scf) (A single LHV or HHV shall be applied to the entire volumetric flow for the day based on fuel analysis data)

$V_{IF}$  = Daily Hourly Aggregate Mass flow of ineligible fuels, as fired (lb/hr)

## II. Projects Using Eligible and Ineligible Fuels

**Determining the total heat input for all fuels**

Total Heat input on a daily basis is the sum for the Heat Inputs for all fuels (Equations 4 and 5 or Equations 6 and 7 above)

**Equation 8: Daily Total Heat Input**

$$HI_T = HI_{EF} + HI_{IF}$$

Where:

$HI_T$  = Total Heat Input from Eligible + Ineligible Fuels (MMBtu)

$HI_{EF}$  = Eligible Biomass Heat Input (as described in the preceding section)

$HI_{IF}$  = Ineligible Fuel Heat Input (as described in the preceding section)

**METHODOLOGY FOR CALCULATING RPS-RELATED EXCESS SULFUR  
EMISSION REDUCTIONS FOR COFIRING ELIGIBLE AND INELIGIBLE FUELS**

This methodology determines the reductions in sulfur emissions attributable to the displacement of ineligible fuels with higher sulfur content (e.g. coal, creosote treated wood, railroad ties, tire derived fuels) by clean wood fuels eligible for the RPS.

**Solid Fuel Facilities**

The RPS rules permit facilities to retain the amount of sulfur reductions necessary to meet permitted emissions for the facility. Sulfur emission reductions in excess of the permitted limits attributable to RPS eligible fuel use are transferred to the state and retired with each RPS payment for eligible renewable generation. If excess sulfur emission reductions exist, the number of reductions transferred to NYSERDA is calculated with the following method:

The RPS-related Excess Sulfur Emission Reductions  $E_{RE} = E_{IF} - E_A$ ; where

$E_{IF}$  = Calculated emissions (SO<sub>2</sub> tons) that would have been produced from the sole use of the ineligible fuels used during the monthly reporting period.

$E_A$  = Actual emissions (SO<sub>2</sub> tons) measured per EPA requirements during the monthly reporting period

Calculate the emissions (SO<sub>2</sub>tons) attributable to eligible biomass co-fired during the monthly reporting period:

$E_{EF}$  = Calculated SO<sub>2</sub> emissions (tons) from eligible biomass fuels

$M_{EF}$  = Measured mass of eligible biomass fuel (tons) fired daily.

$MCW_{EF}$  = Measured moisture content of eligible biomass fuel determined on a wet basis.

$[S]_{EF}$  = Fuel concentration (dry basis) of elemental sulfur as measured in the fuel ultimate analysis.

$\eta$  = Sulfur removal efficiency of any pollution control devices used

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$$E_{EF} = \sum M_{EF} \times (1 - MCW_{EF}) \times [S]_{EF} \times (64/32) \times (1 - \eta)$$

(Daily totals summed over the monthly reporting period)

## II. Projects Using Eligible and Ineligible Fuels

Calculate the expected emissions (SO<sub>2</sub>tons) produced by ineligible fuels based on the actual mix of ineligible fuels during the monthly reporting period.

$E_{IF}$  = Emissions expected to be produced by the sole use of the ineligible fuels.

$AP$  = Actual Production (net MWh) measured at the Injection Point during the monthly reporting period.

$AP_{EF}$  = Actual Eligible Production (net MWh) calculated for the eligible biomass portion for the fuel mix per the reporting requirements based on cofiring percentage

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$$E_{IF} = (E_A - E_{EF}) \times AP / (AP - AP_{EF}) \times (1 - \eta)$$

Calculate RPS-related Excess Reductions for the Reporting Period

$$E_{RE} = E_{IF} - E_A$$

The reductions are only counted and reported if they lower actual SO<sub>2</sub> emissions below the permitted emissions limit for the plant for the month. In cases where the permitted emissions rate ( $E_{Permitted}$ ) is less than the emissions rate expected from the sole use of ineligible fuels then the Reductions are calculated as:

$$E_{RE} = E_{Permitted} - E_A$$

Calculations must also take into account the efficiency of any sulfur removal devices, such as flue gas desulfurization, so that sulfur emissions are calculated at the exit of the pollution control device. If no such devices are present, the scrubber efficiency is to be set to zero.

### **Liquid, Gaseous Fueled Facilities**

On a case-by-case basis, NYSERDA will review any projects that seek to cofire eligible biomass fuels in a liquid or gaseous fueled unit that would impact the plant's SO<sub>2</sub> emissions. To the extent that such activity may result in SO<sub>2</sub> emission reductions, NYSERDA will apply the principles noted above for solid fuels to develop a methodology for measuring RPS-related excess emission reductions.

### **ADDITIONAL REPORTING REQUIREMENTS**

In addition to the reports specified in Section I the seller must provide the following:

#### **Monthly Reports**

Facilities that use Eligible and Ineligible fuels must report the results of fuel sample testing each month. NYSERDA will provide the invoice templates, in Excel file spreadsheets that include tables for reporting the fuel composition and amount of fuel fired for each distinct type of eligible and ineligible fuel used at the facility. Each test result must be backed up by the laboratory analysis report that must be kept on file at the facility for the length of the RPS contract.

#### **Semiannual and Annual Reports**

Sulfur and Fuel Composition test results for each combination of supplier and source on a semiannual basis.

### **III. CLEAN MRF FUELS**

The term “Clean MRF Fuel” referred to in the Contract shall mean clean biomass separated from the mixed waste stream of Construction & Demolition (C&D) debris at a permitted Material Reclamation Facility (MRF) or C&D processing facility. Use of Clean MRF Fuel is subject to the fuel quality assurance and control procedures described below. Note, these provisions are not applicable to clean wood separated at the source (the construction or demolition site).

#### **B. REQUIREMENTS**

Requirements for the use of Clean MRF Fuels include:

- Separation of the clean biomass from C&D Debris at a MRF or C&D Processing Facility
- Approval of a Beneficial Use Determination by NYSDEC (BUD) for the use of the fuel
- Initial and monthly sampling and testing of the fuel product to the fuel quality standard adopted by the PSC in PSC Order CASE 09-E-0843<sup>3</sup>
- Fuel flow measurement, reported using templates provided by NYSERDA, for the separate accounting of generation produced from clean MRF fuels each month.

Since portions of the MRF fuel deliveries may not meet the RPS fuel quality standard the facility must abide by the general provisions of Section I and the special provisions for cofiring eligible and ineligible fuel found in Section II.

#### **SUBMISSION OF A FUEL MANAGEMENT, MEASUREMENT, AND CALIBRATION PLAN**

For operational certification the Seller must submit to NYSERDA a Fuel Management, Measurement and Calibration Plan as described in Sections I and II. For facilities firing Clean MRF Fuels additional requirements, beyond those prescribed in Sections I and II, which must be addressed in the Plan:

#### **FUEL MANAGEMENT, MEASUREMENT, AND CALIBRATION PLAN**

##### **3. FUEL PROCUREMENT**

Describe the fuel sources and estimate delivered proportions of each fuel type (e.g. harvested wood, Clean MRF Fuel). Identify fuel procurement QA/QC provisions that ensure all Clean MRF Fuel suppliers have an effective QA/QC program in place to provide biomass fuels from the C&D waste stream meeting the criteria for RPS eligibility. Describe the process for certifying suppliers to meet RPS requirements. The Plan shall provide for NYSERDA’s review and approval of each MRF supplier. If harvested fuels are used then the facility’s Forest Management Plan can be referred to in this section.

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<sup>3</sup>Rulemaking Allowing Clean Wood Separated from Construction and Demolition Waste at Material Reclamation Facilities to be Eligible for Use as Biomass Fuel in the Renewable Portfolio Standard Program. Niagara Generation, LLC, Retail Renewable Portfolio Standard, Order Approving Petition with Modifications, State of New York Public Service Commission, Case 09-E-0843, November 22, 2010, p 16-17.

## **FUEL MANAGEMENT AND INSPECTION**

To ensure that the MRF Separated Clean C&D Debris meets fuel quality standards referenced in the PSC Order CASE 09-E-0843, the Plan from the Seller must provide the fuel inspection procedures for the MRF Separated Clean C&D Wood. The fuel quality specification should reference the fuel quality test limits listed in Section C below. As stated in the New York Public Service Commission (PSC) Order the Seller shall maintain supply contracts only with facilities permitted to receive and process C&D debris by the state in which they are located. The Seller should only accept Clean MRF Fuels from MRFs that have been approved by NYSERDA.

## **OPERATING PROCEDURES**

No additional requirements

## **FUEL FLOW MEASUREMENT AND SAMPLING**

Laboratory analytical testing of fuel samples is required initially for operational certification and then monthly for reporting RPS eligible energy production and invoicing. The facility may choose to use either of the following options for monthly fuel sampling:

### **Option 1: Regular sampling of as-fired Clean MRF Fuel prior to fuel blending for firing (*Preferred Method*)**

Grab samples from the unblended as-fired eligible Clean MRF Fuel stream will be taken once every 3-hour period at a collection station prior to blending and/or transport to the boiler. Fuel Quality Testing will be conducted using a monthly aggregated “super sample.” *This method requires the facility to have a separate storage and fuel feed system for the Clean MRF Fuels, similar to the requirements of cofiring facilities.*

### **Option 2: Random sampling each delivery of Clean MRF Fuel at the power generating facility**

For this option, grab samples are withdrawn from the interior of the load at predetermined intervals that span the load. This method allows for random sampling of the load since the operator cannot visually select the sample from the top of the load. The facility may propose an alternative random method for NYSERDA consideration if it prevents operators from preferentially selecting the cleanest sample material. Samples can then be bagged and labeled for testing. “Super samples” are aggregated from individual samples collected over a month’s time. The facility will take a minimum of three samples for each load using a procedure that ensures random sampling from the delivery vehicle. Delivery samples will be identified with the supplier and the portion unused in the super sample will be preserved until the monthly test results are received by the facility and reported to NYSERDA.

### **Preparation and Testing of Monthly Samples**

Individual fuel samples taken each month must be ground and combined and thoroughly mixed to make up the month’s test sample (“super sample”) shipped to the lab. The monthly super sample should be shipped on the next business day following the close of the month. Up to three weeks will be allowed from the day that samples are shipped to the lab for the completion of all tests. In practice this means that invoices to NYSERDA for one month of renewable power production will likely be submitted at the earliest in the fourth week of the month following production to allow for the inclusion of test results. If the fuel test results

exceed the limits for contamination then the Clean MRF Fuel portion of the total fuel fired that month and the associated generation will be ineligible under the RPS.

To ensure the proper measurement and accounting for monthly RPS eligible generation for each month the following additional requirements for both Options 1 and 2 must be met. Monthly Samples will be subject to a proximate analysis to determine moisture content and higher heating value. If the monthly Clean MRF Fuel deliveries fail to pass the RPS fuel quality test criteria the entire and full amount of monthly generation from Clean MRF Fuels must be deducted from the invoice as ineligible fuel using the same methods for reporting of cofired eligible biomass and ineligible fuels. Specifically, data regarding the heating value and mass flow of the rejected load and the energy conversion efficiency of the unit will be used to determine the amount of energy generation disqualified from the RPS invoice.

#### **Use of Subsamples**

The Facility may wish to collect subsamples that collectively represent the entire amount of Clean MRF Fuel fired in the month. Subsamples may represent fuel fired over a smaller time interval (weeks or days), fuel delivered by each supplier in the month, or equal increments of fuel mass flow fired (every 10 tons). As long as the subsample increments collectively represent the entire amount of fuel fired in the month they may be treated as subsamples for fuel quality analysis. In the event that the Monthly Super Sample fails to meet the Clean MRF Fuel Quality standard, the facility may order additional tests performed for all the subsamples to determine what portion of the fuel fired is ineligible. The portion of the monthly fuel fired that is determined to be ineligible on a heat input basis by subsample testing will be deducted from the eligible fuel portion and reported separately as ineligible fuel fired in the month.

#### **FUEL TESTING AND ANALYSIS**

The testing requirements for use of Clean MRF Fuels are specified in Section C. The Plan will identify the third Party labs that will conduct the testing of the chemical composition of the fuel. The labs used must not be affiliated with the Seller and experienced with the analytical testing.

#### **ANALYSIS AND TEST METHODS FOR USING CLEAN MRF FUELS**

Test protocols for contaminants typically found in C&D wastes were adopted by the PSC in the 2010 Order.<sup>4</sup> To assure accurate test results, it is critical that the samples be thoroughly ground and mixed to homogenize the sample material prior to testing. The list of contaminants and test methods for measuring contaminant concentrations are provided in Table 5. Different versions of the same test method, designated by the test method suffix letter, are acceptable. Where the performing lab has a choice the latest version should be used. If the facility's chosen lab prefers an alternative test method to the PSC accepted method it must conduct a comparative analysis. The comparative analysis must statistically prove that the alternative method is equally precise

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<sup>4</sup>Contaminant Limits established in the 2010 Order are maximum concentration limits for any MRF Clean Fuel

and repeatable as the PSC approved method. The alternative method cannot be used until approved by NYSERDA.

In Table 6 A and B and Table 7 the test reporting forms are provided. The reporting form in Error! Reference source not found. Table 6 A includes the limits for concentrations of contaminants in eligible Clean MRF Fuels. Contaminant Limits listed in the second column of the reporting form above were adopted by the PSC. Different versions of the same test method as designated by the test method suffix letter are all acceptable.

**Table 5 Test Methods for Clean MRF Fuels- Analysis Basis: Dry Matter (Moisture Free)**

<b>Contaminant</b>	<b>Test or Measurement Method</b>	<b>Frequency</b>
Arsenic, Cadmium, Chromium, Lead, Selenium, Silver, Titanium, Zinc	EPA SW 846-6010C – Inductively Coupled Plasma-Atomic Emission Spectrometry	monthly
Mercury	EPA SW 846-7471 – Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)	monthly
Total Pesticides	EPA SW 846-8081B – Organochlorine Pesticides by Gas Chromatography	monthly
Total Herbicides <sup>5</sup>	EPA SW 846-8151A – Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzoylation Derivatization	monthly
Polychlorinated Biphenyls (PCBs)	EPA SW 846-8082A – Polychlorinated Biphenyls (PCBs) by Gas Chromatography	monthly
O, M, & P Cresols	EPA SW 846-8270D – Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	monthly
Chlorine	ASTM D6721 - Standard Test Method for Determination of Chlorine in Coal by Oxidative Hydrolysis Microcoulometry	monthly
Plastics	Visual Inspection	each delivery
Total Non-wood <sup>6</sup>	Visual Inspection	each delivery

<sup>5</sup> EPA SW846-SV 8270 can be used as an alternate test method to EPA SW 846-8151A for pentachlorophenol

<sup>6</sup> Non-wood does not include soil and metal fasteners which are noncombustible

**Table 6 A MRF Fuel Quality Testing Form - Limits in PPM Analysis Basis: Dry Matter (Moisture Free)**

<b>MRF Fuel Quality Testing</b>			<b>Monthly Super Sample Results (ppm)</b>
<b>MRF Fuel Quality Analysis</b>	<b>Limit (total)</b>	<b>EPA Test Method</b>	
Arsenic (ppm)	50.00	SW 846-6010C	
Cadmium (ppm)	20.00	SW 846-6010C	
Chromium (ppm)	200.00	SW 846-6010C	
Lead (ppm)	250.00	SW 846-6010C	
Selenium (ppm)	20.00	SW 846-6010C	
Silver (ppm)	100.00	SW 846-6010C	
Titanium (ppm)	300.00	SW 846-6010C	
Zinc (ppm)	200.00	SW 846-6010C	
Mercury (ppm)	0.20	SW 846-7471	
Total Pesticides <sup>(1)</sup> (ppm)	0.16	SW 846-8081B	
Total Herbicides <sup>(2)</sup> (ppm)	0.50	SW 846-8151A	
PCBs (ppm)	20.00	SW 846-8082A	
O, M, and P Cresols (ppm)	1,200.00	SW 846-8270D	
Chlorine (ppm)	1,500.00	ASTM D6721	
<b>Meets Standard?</b>			Yes/No

Notes 1 and 2: Totals for all Pesticides and Herbicides are calculated in Table 7 (Specific Pesticides and Herbicides to be Analyzed) and reported on this form.

**Table 6 B Contaminants Evaluated by Visual Inspection on each Delivery**

<b>Contaminant</b>	<b>PSC Acceptance Limits</b>	<b>Inspection Results</b>
Plastics	1% dry weight	
Total Non-wood	1% dry weight	

Table 7 below lists the full set of Herbicides and Pesticides required to be analyzed. The Totals on this supporting form should be entered into the total Herbicides and Pesticides rows of the reporting form in Table 6A.

**Table 7 Specific Pesticides and Herbicides to be Analyzed**

<b>(1)Pesticides tested for include:</b>			<b>Monthly Super Sample</b>
<b>Analyte</b>	<b>Cas Number</b>	<b>EPA Test Method</b>	
4,4'-DDD	72-54-8	SW 846-8081B	
4,4'-DDE	72-55-9	SW 846-8081B	
4,4'-DDT	50-29-3	SW 846-8081B	
Aldrin	309-00-2	SW 846-8081B	
alpha-BHC	319-84-6	SW 846-8081B	
beta-BHC	319-85-7	SW 846-8081B	
Chlordane, Total	57-74-9	SW 846-8081B	
delta-BHC	319-86-8	SW 846-8081B	
Dieldrin	60-57-1	SW 846-8081B	
Endosulfan I	959-98-8	SW 846-8081B	
Endosulfan II	33213-65-9	SW 846-8081B	
Endosulfan sulfate	1031-07-8	SW 846-8081B	
Endrin	72-20-8	SW 846-8081B	
Endrin aldehyde	7421-93-4	SW 846-8081B	
Endrin ketone	53494-70-5	SW 846-8081B	
Heptachlor	76-44-8	SW 846-8081B	
Heptachlor epoxide	1024-57-3	SW 846-8081B	
Lindane	58-89-9	SW 846-8081B	
Methoxychlor	72-43-5	SW 846-8081B	
<b>Total:</b>			-

<b>(2)Herbicides tested for include:</b>			<b>Monthly Super Sample</b>
<b>Analyte</b>	<b>Cas Number</b>	<b>EPA Test Method</b>	
2,4,5-T	93-76-5	SW 846-8151A	
2,4,5-TP	93-72-1	SW 846-8151A	
2,4-D	94-75-7	SW 846-8151A	
4-Nitrophenol	100-02-7	SW 846-8151A	
Dalapon	75-99-0	SW 846-8151A	
Dicamba	1918-00-9	SW 846-8151A	
Dichlorprop	120-36-5	SW 846-8151A	
Dinoseb	88-85-7	SW 846-8151A	
Pentachlorophenol	87-86-5	SW 846-8151A or EPA SW 846-SV 8270	

<b>Requirements:</b>	1. Analysis Basis: HHV - As Received; All Other Analytes - Dry Basis (Moisture Free)
	2. Testing was performed using the EPA/ASTM test method listed for each analyte
<b>Clarifications:</b>	1. EPA SW864-SV 8270 can be used as an alternate test method to EPA SW 864-8151A for pentachlorophenol
	2. Different versions of the same test method are acceptable designated by the test method suffix letter.

## **ADDITIONAL REPORTING REQUIREMENTS**

In addition to the reports specified in Sections I and II the seller must provide the following:

### **Monthly Reports**

Facilities that use Clean MRF fuels must create a monthly super sample representing all the MRF fuel used in the month and provide the results of fuel quality testing in the form of Table 6 A and Table 7 along with the invoice to NYSERDA each month. Each test result report must be backed up by the laboratory analysis report that must be kept on file at the facility for the length of the RPS contract. The Facility must also report results of a proximate analysis to determine moisture content and higher heating value for monthly super samples of the Clean MRF Fuel. The contaminants listed in Table 6B are visually inspected and reported in the fuel delivery logs.

In the event that the test results show that one or more contaminants in the fuel exceed the limits specified in Table 6, the entire Clean MRF fuel supply for that month must be reported as ineligible fuel and subtracted from the total biomass generation reported for the period.

The Facility may wish to collect subsamples that collectively represent the entire amount of Clean MRF Fuel fired in the month. Subsamples may represent fuel fired over a smaller time interval (weeks or days), fuel delivered by each supplier in the month, or equal increments of fuel mass flow fired (every 10 tons). As long as the subsample increments collectively represent the entire amount of fuel fired in the month they may be treated as subsamples for fuel quality analysis. In the event that the Monthly Super Sample fails to meet the Clean MRF Fuel Quality standard, the facility may order additional tests performed for all the subsamples to determine what portion of the fuel fired is ineligible. The portion of the monthly fuel fired that is determined to be ineligible on a heat input basis by subsample testing will be deducted from the eligible fuel portion and reported separately as ineligible fuel fired in the month.

### **Initial Reports**

Accompanying the Fuel Management Measurement and Calibration Plan report should be the initial fuel quality test summary in the form of Table 6A and Table 6B.

## **IV. BIOMASS RECOVERED FROM MIXED WASTE STREAMS**

### **C. BIOMASS RECOVERED FROM MIXED WASTE STREAMS**

These contract provisions apply to facilities using biomass recovered from municipal mixed-waste streams or other waste biomass specifically listed in the PSC Orders<sup>7</sup>. These provisions do not apply to clean MRF Fuels.

#### **MIXED MUNICIPAL AND AGRICULTURAL WASTE STREAMS**

For biomass recovered from municipal mixed-waste streams or other waste biomass listed in the PSC Orders, the RPS program requires a primary conversion step to liquid or gaseous fuels. *For this reason this section refers to the raw biomass used at the facility as a biomass feedstock, which is distinct from the final fuel product used to generate electricity. The feedstock conversion step produces a clean biomass fuel used for power generation.* Power generation facilities that choose to use these types of biomass must demonstrate that emissions from electric energy production from the use of the adulterated feedstocks are equal to or less than the emissions for the process using unadulterated biomass feedstocks.

The biomass feedstock must be produced at a permitted solid waste facility in compliance with all NYSDEC standards for operation (or an equivalent set of state standards for solid waste management outside of New York) and is subject to the NYSDEC BUD review process. The feedstock production facility must have a regular independent monitoring program that pays for NYSDEC (or approved third-Party) monitors to ensure that its biomass processing is consistent within facility permits and conditions. In addition, these feedstock production facilities are required to employ sorting techniques that recover the biomass fraction of mixed waste. As Part of the operational certification process the power generating facility will be required to provide copies of the solid waste BUD and air permits.

#### **SUBMISSION OF A FUEL MANAGEMENT, MEASUREMENT, AND CALIBRATION PLAN**

For operational certification the Seller must submit to NYSERDA a Fuel Management, Measurement and Calibration Plan as described in Section I. For this class of fuels the fuel testing portion of the plan must address the special requirements for the Pollutant Precursor Screening Analysis and Comparative Emissions Testing. The results of comparative emissions testing will be submitted to NYSERDA in a separate report as a key element of the operational certification process. Topics to be addressed in the Plan beyond what is required in Section I are described by section below.

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<sup>7</sup> From the PSC Order 9/24/2004 Appendix B: Agricultural by-products such as leather and offal and food processing residues that are converted into a biogas or liquid biofuel. Adulterated forms of wood, such as plywood and Particle board, may be used as a feedstock for biogas or liquid biofuel conversion technologies if it can be demonstrated that the technology employed would produce power with emissions comparable to that of biogas or liquid biofuel using only unadulterated sources as feedstock.

## **FUEL MANAGEMENT, MEASUREMENT, AND CALIBRATION PLAN**

### **4. FUEL PROCUREMENT**

Identify all mixed waste sources. The biomass feedstocks must be provided by permitted solid waste facilities in compliance with all NYSDEC standards for operation (or an equivalent set of state standards for solid waste management outside of New York). Identify fuel procurement QA/QC provisions that ensure that fuel suppliers have an effective QA/QC program in place to provide consistent biomass mixed waste fuels conforming to the fuel specification approved for comparative testing. Describe the process for certifying suppliers to meet RPS requirements.

### **5. FUEL MANAGEMENT AND INSPECTION**

The feedstock production facility must describe or provide documentation for the independent monitoring program that pays for NYSDEC (or approved third-Party) monitors to ensure that its biomass processing is consistent within facility permits and conditions. Independent monitors must be identified in the plan and evidence of their qualifications provided.

### **6. OPERATING PROCEDURES**

No additional requirements.

### **7. FUEL FLOW MEASUREMENT AND SAMPLING**

No additional requirements.

### **8. FUEL TESTING AND ANALYSIS**

To operationally certify a power generation facility using adulterated biomass feedstocks listed in the PSC Orders for the RPS program, the following steps must be taken for comparative emissions testing and analysis. The standard for eligibility is demonstration that emissions from electric energy production from the use of the adulterated feedstocks is equal to or less than the emissions for the process using unadulterated biomass feedstocks. The Plan must address how each step of the process will be accomplished according to the specifications below. Additional guidance is provided in the Biomass Power Guide on the NYSERDA RPS Website.

**Step 1 – Pollutant Precursor Screening Analysis**– The facility must submit an ultimate and proximate feedstock analysis as well as compound- and element- specific analyses of the adulterated feedstock(s). These chemical analyses for feedstock screening must include the components of the feedstock that, under the combustion conditions present in the proposed biomass facility, could produce air pollutants of concern. In this methodology, they will be called “precursor” compounds and elements. Test results from these analyses enable NYSERDA and the facility to determine the air emissions testing regime that will be required to demonstrate RPS compliance. The sampling protocol for sample collection and analysis must provide assurance that the feedstock analyses are representative of the feedstocks that will be used at the facility. At a minimum, the air pollutants that NYSERDA is concerned with are those for which the facility was required to test in permitting, plus the air pollutants listed in the pollutants of concern column of Table 8 below. The limits are based on typical

feedstock analyses for forest-harvested wood, in the expectation that most adulterated feedstock will be significantly wood-derived.

Any precursor elements or compounds that are found in the proposed feedstock in greater concentration than in the unadulterated biomass sample will be listed for testing along with its associated air pollutant(s) generated in combustion in the test report submitted to NYSERDA. The associated air pollutant(s) will be included in the comparative air emissions test. The screening analysis report to NYSERDA should also include a copy of the air permit, listing the feedstocks that the facility is permitted to convert. NYSERDA will review the documents and recommend approval of the pollutant list to the office of energy Efficiency and the Environment (OEEE) of the New York State Department of Public Service (DPS) or return the list to the facility with a list of deficiencies noted.

**Table 6 Precursors to Pollutants of Concern for Adulterated Biomass**

	<b>Precursor</b>	<b>Air Pollutants of Concern</b>	<b>Precursor Limit (ppm, dry basis)</b>
	Mercury (Hg)	mercury	0.17
	Organic Matter	benzo-a-pyrene	n/a <sup>8</sup>
	Chlorine (Cl)	hexachlorobenzene; 2,3,7,8-tetrachlorodibenzo-p-dioxin; 2,3,7,8-tetrachlorodibenzofuran; polychlorinated biphenyls	370
<b>RCRA Metals</b>	Arsenic	elemental and organic compound emissions	5
	Cadmium		0.9
	Chromium		17
	Lead		4.4
	Zinc		200
	Polychlorinated Biphenyls (PCBs)	PCBs, PCDDs	<i>detectable</i>
	Plastics, Total Non-wood	hexachlorobenzene; 2,3,7,8-tetrachlorodibenzo-p-dioxin; 2,3,7,8-tetrachlorodibenzofuran (via HCl); polyaromatic hydrocarbons	1% by dry weight

<sup>8</sup>Benzo-a-pyrene emissions tend to be a function of combustion conditions, rather than of the type or chemical composition of the fuel used. For this reason, there will be no precursor screening for this pollutant of concern; all facilities will be required to include it in their comparative emissions testing protocol.

**Step 2 – Comparative Emissions Test Protocol Development** – Comparative emissions testing requires that air emissions generated by firing the fuel produced from the unadulterated feedstock(s) and from the corresponding adulterated feedstock(s) be measured separately and the results compared. Based on the prescribed list of pollutants to be tested, the facility will develop a test plan for comparative air emissions measurement. Wherever possible, the protocol will use ASTM, EPA or DEC approved test methods. A protocol for measuring each air pollutant must be provided. The facility owner’s comparative test plan is required to specifically address the issue of feedstock variability so that the full range of permitted feedstock compositions is evaluated. The Plan will include the approved list of pollutants to be measured and NYSERDA will review the plan and then either recommend approval to OEEE or return it to the facility with a list of deficiencies noted. The facility must resubmit a revised plan. It is possible that a facility may have a technology or adulterated feedstock that precludes effective comparative emissions testing because the technology is not compatible with typical unadulterated feedstocks. If this is the case and alternative testing plan may be submitted for NYSERDA consideration. The Biomass Power Guide provides additional guidance on acceptable alternative plans.

**Step 3 – Emissions Testing** - The facility must make all arrangements to conduct the comparative emissions test. NYSERDA may send a test monitor (either contractor or other state agency) to observe the tests and report any deviations from the test plan. The report from the emissions testing contractor including the statistical analysis of the results must be submitted to NYSERDA. The executive summary of the test report should clearly state which pollutants were found to be within the prescribed limits and which pollutants exceeded the limits.

## **ANALYSIS AND TEST METHODS FOR USING BIOMASS FROM MIXED MUNICIPAL AND AGRICULTURAL WASTE STREAM**

Screening Analysis methods approved by NYSERDA are listed in Table 9. Alternative methods may be proposed and submitted to NYSERDA for approval. The facility will submit to NYSERDA the results of the chemical analyses shown in Table 9 plus any analyses required to measure concentrations of precursors to air pollutants listed in the facilities air permits (e.g. sulfur).

**Table 9 Adulterated Biomass Screening Analysis Methods**

	Precursor	Test Method for Solid Materials
	Mercury (Hg)	EPA SW 846-7471 – Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)
	Organic Matter	<i>not screened for; a function of combustion conditions</i>
	Chlorine (Cl)	ASTM D6721 - Standard Test Method for Determination of Chlorine in Coal by Oxidative Hydrolysis Microcoulometry
RCRA Metals	Arsenic	EPA SW 846-6010C – Inductively Coupled Plasma-Atomic Emission Spectrometry
	Cadmium	
	Chromium	
	Lead	
	Zinc	
	Polychlorinated Biphenyls (PCBs)	EPA SW 846-8082A – Polychlorinated Biphenyls (PCBs) by Gas Chromatography
	Plastics, Total Non-wood	Flotation or air separation <sup>9</sup>

For the Comparative Emissions Test the unadulterated feedstock should be selected by the facility for compatibility with its conversion technology, which may be designed for feedstocks of a specific size, moisture, and chemical composition. The adulterated feedstock(s) used for testing should be representative of the full range of feedstocks permitted for use. **The choice of both adulterated and unadulterated feedstocks must be clearly indicated in the Plan submitted to NYSERDA, and the unadulterated baseline feedstock is subject to NYSERDA approval.** A Partial list of approved test methods is provided in Table 10.

<sup>9</sup> The specific methodology for performing this separation and measurement must be submitted to and approved by NYSERDA before the screening tests are performed.

**Table 10 Comparative Air Emissions Tests**

<b>Pollutant of Concern</b>	<b>Test For</b>	<b>Analytical Test Method</b>
benzo-a-pyrene	polycyclic aromatic hydrocarbons (PAH)	EPA SW 846 Method 0010 ( <i>Modified Method 5 Sampling Train</i> ) with EPA SW 846 Method 8270D ( <i>Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry</i> )
hexachlorobenzene (HCB)	hexachlorobenzene (HCB)	EPA SW 846 Method 0010 ( <i>Modified Method 5 Sampling Train</i> ) with EPA SW 846 Method 8270D ( <i>Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry</i> )
2,3,7,8-tetrachlorodibenzo-p-dioxin	polychlorinated dibenzo-p-dioxins/ dibenzofurans (PCDD/F)	EPA Method 23 ( <i>Determination of Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans from Municipal Waste Combustors</i> )
2,3,7,8 – tetrachlorodibenzo-furan		
arsenic	inorganic and organic metals emissions	40 CFR Part 60, Appendix A, Method 29 ( <i>Metals Emissions from Stationary Sources</i> )
cadmium		
chromium		
alkylated lead compounds		
mercury		
zinc		
polychlorinated biphenyls (PCB)	polychlorinated biphenyls (PCB)	EPA SW 846 Method 0010 ( <i>Modified Method 5 Sampling Train</i> ) with EPA SW 846 Method 8270D ( <i>Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry</i> )

**ADDITIONAL REPORTING REQUIREMENTS**

In addition to the reports specified in Section I the seller must provide the following:

**Initial Reports**

The Fuel Screening Analysis Report and the Comparative Emissions Test Report prior to Operational Certification